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# Case Study—The West Bank

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**Case Study –The West Bank**

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## Introduction

Drawing comparisons between the case of the West Bank and the American West may surprise at first sight. Yet, the West Bank shares enough aspects with the American West to justify such a comparison. Both areas lie in an arid zone where irrigated agriculture is the sector consuming most water in spite of its generating the least added value through that use of water in comparison with other sectors. Both areas witness intricate interactions between the irrigating farmers and the political decision makers responsible for this allocation of water to persist. Both areas witness claims of water scarcity and of an "other" unfairly hoarding huge amounts of water. In the case of the West Bank, farmers turn their eyes toward the Israelis who are entitled to 82% of the West Bank's renewable water resources according to the 1995 treaty between Israel and the Palestinians. In the case of the American West, the abundant resources lying north of the border, in Canada, provide the same attraction. Such claims shape the perceptions of the water users and affect the nature of the policies that can be successful. Indeed, a policy will not be successfully applied because it is the most coherent with a drawing board rationality that would maximize the profits generated our of water use. A policy will rather be successfully implemented because it is perceived as legitimate by the community of water users.

Of course the similarities end here. The American West covers a huge surface area that could contain several European states whereas the entire West Bank can fit comfortably within the state of Missouri. The American West is part of a sovereign federal state whereas the West Bank has a strange status, neither sovereign state nor totally occupied militarily by the neighboring state.[1] The United States are clearly the stronger party when negotiating with Canada concerning water whereas the Palestinians are clearly the weaker party when negotiating with Israel. Finally, the technology and the type of social organization determining the use and the allocation of water are widely different in both countries.

A much advertised element of the Israeli-Palestinian conflict concerns water. The importance of water was clearly recognized when it appeared as one of the five topics that were left for final status talks at the time when the interim Israeli-Palestinian agreements were concluded. Much literature has been devoted to the issue of water sharing between Israel and the Palestinians, essentially portraying it as a binational competition pitting Israel on one side and the Palestinians on the other. This view certainly finds support in the 1995 agreement that determined how the contents of the three aquifers lying in the West Bank would be shared during the interim period between Israelis and Palestinians. Although the agreement refers to millions of cubic meters, it expresses in total a ratio of 82% for Israelis and 18% for the Palestinians.[2] These figures

[1] Note that Israel never annexed the West Bank as it did the Golan Heights and East Jerusalem. Thus the Jericho area does not lie within the state of Israel even according to Israel itself.

[2] Israeli-Palestinian agreement, Washington, 28 September 1995, Protocol Concerning Civil Affairs, Annex 10, paragraph 20, article 40 of the Protocol Concerning Civil Affairs.

have been contested by several Palestinian researchers who say the contents of the eastern aquifer were overestimated at the time of concluding the agreement and the quantities which Palestinians are expected to draw there are unachievable.[3]

The perception of the competition over water as a binational one also surfaces from the military orders concerning water in the Occupied Territories that were put out in the wake of the occupation. On 15 August 1967, Military Order no 92 granted complete authority over all issues concerning water to an Israeli officer named by the Area Commander. The following fall, Military Order no 158 of 19 November 1967 submitted the construction of any new water installations to the prior obtainment of a permit and allowed the confiscation of any water resource for which no permit existed. One year later, Military Order no 291 of 19 December 1968 invalidated all prior and existing arrangements of disputes concerning water.[4] Military orders remained in force even after the conclusion of the interim agreements between Israel and the Palestinians. Indeed, according to article VI.9 of the 4 May 1994 agreement signed in Cairo, which came to be known as Oslo II, the laws and Military Orders in force before the signature of the agreement will remain in force unless they are amended or abrogated in the manner specified in the agreement.[5] Thus, the agreement of the joint water committee is necessary, and this committee functions on the basis of consensus and is half composed of Israelis and half of Palestinians.

These military orders have often been portrayed as an example of Israeli appropriation of complete control over water in the Palestinian Territories. These orders have granted Israel extensive powers over water and have allowed the situation that was officially recognized in 1995 whereby most of the renewable water of the West Bank aquifers is used by Israelis inside the Green Line and in settlements. They do not account however for the degree of freedom, no matter how limited, which the Palestinians have regarding water management.

Close scrutiny of the many competitions, cooperations and conflicts that surround water issues in Israel and The West Bank, reveals that what appears initially as a simple binational competition is in fact a maze of interactions. This paper proposes to examine how water access, water use and water allocation is determined as far as the Palestinians are concerned. Water is essentially used for irrigation or for domestic use in the West Bank and Gaza Strip. Industrialization remains quite limited and does not claim a significant proportion of water used in these territories. This paper will first of all sketch the situation for irrigation. It will then sketch the situation for domestic use. It will look briefly at examples of competitions and conflicts for water and will illustrate the many interactions among actors deploying strategies over widely differing scales. It will bring

[3] Communication given by Dr. Fawzi Naji, political advisor of the PWA, PASSIA roundtable , 4 February 1999.
[4] Israeli Millitary Orders in the Occupied Palestinian West Bank 1967-1992, compiled by Jamil Rabah and Natasha Fairweather, Jerusalem Media and Communication Center, Jerusalem, 2nd edition, 1995,
[5] Treaty

in the international dimension of these competitions and conflicts for water only after the local and national dimensions will have been examined. Finally, it will highlight various dangerous mechanisms that are especially fuelled by the fact that the competition for water in the area has so often been portrayed as a mere binational competition.

## Water for Irrigation

Irrigation is not very much developed in the West Bank. According to ARIJ, only 6.0% of the cultivated area of the West Bank was irrigated in 1994.[6] Yet, examining how irrigation water is accessed, what rules determine that it should be devoted to that purpose and how it should be allocated is important. Indeed, 65% of the water used by the Palestinians is devoted to irrigation.[7] In 1999, the Palestinian Water Authority was recognizing in its strategy document the need to solve legal, political and cultural complications concerning the fact that it was going to take over what it called "the established private water rights".[8] Close scrutiny reveals that much of this irrigation water is regulated according to communal property regimes, not private ones. The difference is important because transforming a private property into a public property is much simpler than transforming a communal property into a public one. Moreover, the transformation contemplated here goes beyond property itself. It proposes to change existing property regimes.

A property regime is the set of arrangements developed by a human group to control its use of a natural resource. A property rights regime includes both the property rights and the property regulations. The property rights include the bundles of entitlements that define the rights and duties of the owners concerning the use of the resource. The property regulations determine the manner in which these rights and responsibilities are exercised.[9] Within a private property regime, ownership of a resource is individual. The owner has the right to use the resource in a socially acceptable way and to control the access to the resource. The owner also has the responsibility to avoid socially unacceptable uses of the resource. Within a communal property regime, ownership of a resource is collective. It can include the inhabitants of a village, or a group of families within a village for example. The collective owner has the right to exclude the non-owners from accessing or using the resource. The collective owner also has crucial responsibilities: maintaining the infrastructure linked to the resource and limiting the rate of utilization of the resource so as to make its use sustainable.

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[6] Applied Research Institute – Jerusalem, Water Resources and Irrigated Agriculture in the West Bank, Bethlehem, The West Bank, March 1998, p.94.
[7] Strategy for Water Management in The West Bank, Palestinian National Authority, Palestinian Water Authority, , January 1999, p. 3.
[8] Ibid., p.9.
[9] Susan Hanna, "Property Rights, People and the Environment", Beijer Reprint Series, no 74, reprint from Getting Down to Earth, edited by R. Costanza, O. Segura and Juan Martinez-Alier, Island Press, Washington, DC, 1996, p.381.

Much research has been devoted in the past twenty years to the benefits and disadvantages incurred by communal property regimes. Much attention has been brought to the fact that irrigation communities using communal property regimes often prove surprisingly resilient and contribute overall to a significant share of food production via irrigation around the planet. "Local irrigation organizations are exclusive in membership, territorial in defense of resources, resistant to outside intervention, and resilient in the face of change. Restricted membership, however, sometimes includes local elites and excludes less powerful classes, and members' shares in common resources are often proportional to their relative power, wealth and status."[10] This observation by Jonathan Mabry certainly holds true in The West Bank. Customary oral institutions of communal property over water determine water management to this day in much of The West Bank. The persistence of these institutions in spite of decades of military occupation is a credit to the strength of Palestinian civil society and should certainly not be interpreted as a sign of backwardness. It shows us that grassroot regimes are capable of producing social capital to this day.[11] They still have the ability to produce social control over how a resource is accessed, how it is allocated and how it is used. These communal property regimes are generally perceived as legitimate by the Palestinian villagers and are therefore respected. This stands in sharp contrast with the public property regimes governing reticulation networks for example, where illegal connections are numerous.

The communal property regimes do contribute great advantages in terms of water management, but they are not without disadvantages. The type of regimes used to manage wells and springs devoted to irrigation will now be examined.

### Water from Springs

The West Bank contains 527 springs the flow of which varies greatly. Some springs, especially small ones are considered the private property of the spring owner. Some are considered the property of one family that irrigates from it. Some, such as the one that flows inside Salfeet, are entirely harnessed by the municipality to feed the reticulation system bringing drinking water to houses for domestic use. Yet, most sizeable springs are the object of common property regimes and are used for irrigation. The regimes that govern them have been devised and have evolved over centuries. They vary from one spring to the other, yet share some common characteristics. The flow of

[10] Jonathan B. Mabry, "The Ethnology of Local Irrigation", in: Canals and Communities Small Scale Irrigation Systems, Arizona Studies in Human Ecology, The University of Arizona Press, Tucson, ed.: Jonathan B. Mabry, 1996, p.23

[11] We use here the definition of social capital as put out by Elinor Ostrom, i.e. the potential and self-organizing power of a community. Social capital may be built by establishing rules specifying who will be responsible for giving orders or for undertaking certain activities, and when and how these activities will be undertaken. Social capital is multiform and may consist of the improvement of the manner in which common tasks are carried out. See: Elinor Ostrom, Crafting Institutions for Self-Governing Irrigation Systems, Institute for Contemporary Studies, San Francisco, California, 1992, p.30.

the spring is generally allocated according to a rotation in time. A shareholder's water day comes every six, seven or eight days depending on the spring. If a village contains several springs, the rotation may be different from one spring to the other. Often, the number of water days is the same as the number of clans (groups of families) that own land irrigated by that spring. The flow during the first water day may thus be divided among twenty persons whereas the flow during the second water day may be divided among many more or many less shareholders. The length in time of the water share may be the same for all the shareholders within the same day or it may vary among them. Exchanges of water shares may occur, especially among the shareholders of the same day that come from the same family.

Often, institutions nested in one another appear clearly. For example, an oral, informal institution governs one spring in a village. The shareholders of that spring may include only a group of families in the village. The others have no right to irrigation water although they are always allowed to come and fill bottles for domestic use. Within the group of shareholders, subgroups often exist who are composed of the families that share a water day. Any conflict among the members of that subgroup would be resolved among them, without involving the rest of the spring shareholders.

These informal oral institutions often exist in villages that are connected to a reticulation network operated by the municipality. The property regime applying to the reticulation network is completely independent from that applying to the spring. An essential characteristic of the common property institutions governing the springs is their capacity to prevent their own growth. This is essential in order to ensure that a sufficient share of water will remain for the farmer. Thus, one can sometimes see a refugee camp on one side of a valley facing an old village on the other side. The old landed families of the village have all of the irrigation shares and the refugees are only allowed to fill bottles of water at the spring. As the phenomenon of water tankers has grown and as such tankers can draw sizeable amounts of water, the village often now charges the tankers that fill up at their spring. This shows that a customary institution is not synonymous with a static institution. An adaptation (charging the water tankers) occurred when the need was felt to prevent the growth of the access to the spring water. The manner in which springs are shared is never equal, but is generally felt as legitimate by the population that lives around the spring. The rules determining how water is allocated are therefore scrupulously respected and water theft is rare.

Each of the institutions governing the common property of a spring exists entirely independently from the others. They show some general common characteristics simply because they originated and developed in a similar context. Yet, each is a home grown grassroot institution, which explains why none has spelled out identical rules as an other one. Of course, each of these institution functions independently from the Palestinian Authority and expects to keep on functioning this way. The Israelis have essentially put limitations on how the Palestinians could develop their water by submitting the building of any infrastructure to the obtention of a permit for example. They never interfered with

the manner in which they decided to share the water among themselves. So a spring shareholder generally expects the Palestinian Authority to deliver potable water through a reticulation network, but does not expect the same authority to meddle with the property regime to which his spring is submitted.

### Water from Wells

In 1990, Hisham Awartani was reporting that of the 364 Palestinian wells in use in the West Bank, only 38 were devoted to domestic consumption. The rest were used for irrigation. Similarly, he was counting 1791 Palestinian wells in use in the Gaza Strip, of which only 49 were used only for domestic consumption.[12] A quota was applied to the wells used for irrigation, but no quota was applied for those used for domestic purposes. Awartani's sample revealed that 38% of the irrigation wells had pumped less than their quota in 1990. Mechanisms other than the quotas were actually limiting the pumping for irrigation although Awartani did not choose to investigate them. Each of these wells is still the object of private property. The farmers who need irrigation water buy it from the well owner in a monopoly situation. The network of pipes generally link his field to one well only and does not allow him to choose his supplier. Every well uses its owns rules to decide on the priority use of the water, on its price and on its allocation.[13] Often, no rule determine which crops should receive irrigation water as a priority, no rule determines which price should be paid for the water nor which quantities should be sold. All of this is left to a negotiation between the farmer and the well owner.

Most wells still in use appeared rather late in the West Bank as the technology to drill through such a rocky soil and the capital to exploit it only arrived in the late fifties and the early sixties. The well owners were those who had had the capital to have the well drilled. They proceeded to sell the water at whatever price they could, as a private good. The institutions governing irrigation wells are informal and oral. Like the institutions governing springs, they escape the control of the Palestinian Authority. The only control they are submitted to is that of the quota for extraction. This was imposed by the Israelis and is now implemented by the Palestinian Water Authority. The latter does not control the price at which they sell the water nor the type of crops they sell it for. The Israelis never interfered with the manner in which the Palestinians distributed their irrigation wells' water among themselves. So any interference from the Palestinian Authority would not be welcome by the well owners.

[12] Hisham Awartani, Artesian Wells in The West Bank: Present Status and Future Aspirations, Palestinian Hydrology Group, Jerusalem, 1992.
[13] Julie Trottier, Hydropolitics in the West Bank and Gaza Strip, PASSIA, Jerusalem, Dec 1999.

**Difficulties Arising**

When J. Mabry reflected on the remarkable resilience of small, locally built, farmer managed systems facing shifts in political economy, he wrote "[t]he solidarity and success of local irrigation communities and water-user associations is correlated with their ability to limit growth such that membership provides a secure share of water resources and protects them from "free-riding" outsiders."[14]

Of course, in such systems, individuals are not equal facing water. A "water-rich" group and a "water poor" group systematically surface. In such systems, water is not a public good. Yet this boundary drawn by the water using community, which removes water from the realm of public goods, generates another public good in exchange: the security of its members through the resiliency of their water management institution. Within the irrigating community, abundance is spread in the same fashion as scarcity. Inequalities persist during droughts as they do at any other time. The small size of the community often ensures that mechanisms will be enforced in times of drought in order to protect the weakest members. This is not carried out of humanitarian concern but rather because the community is so small that no member can be completele overlooked. Irrigation networks need maintenance and lack of maintenance in one part of the network is susceptible to affect the entire set of users.

Respect of local institutions often prevents any sectorial reallocation of water from irrigation to domestic use in cities for example. Treating water as a public good often leads us to call for such a reallocation on the ground of sound economic use. The full impact of such a reallocation must be evaluated though. It would entail the disappearance of local institutions whose resilience has ensured the security of their communities while simultaneously disrupting the livelihoods of these community members. What may sound like a sound economic option on a greater scale can prove to be a disaster on a smaller scale.

Of course, alternative sources of income can be generated as a counterweight measure when a reallocation is considered. New incomes may be generated through new activities. The livelihoods then are not disrupted, but the local institutions are and so is the security they provided to their members. This contributes largely to explain both the amazing resiliency of local water management institutions and the fact they become enmeshed in many facets of social control.

Water being a public good is now a notion that has made its way into most states' legislation. Yet, social control and security are also worthy public goods. A dual choice implying that only one of them can exist at the expense of the other cannot represent a successful development option.

[14] Jonathan B. Mabry, op.cit., p.13.

These issues are quite salient in The West Bank now. No institution exists that can proceed with a sectorial reallocation of water from irrigation to domestic use. The fact that most of the water available to the Palestinians is controlled by common property regimes and escapes the control of the Palestinian Authority makes such transfers impossible. Moreover, any such transfer would affect negatively the capacity of grassroot institutions to produce social control and security. This difficulty is compounded by the fact that the “water-rich” members of irrigation communities often constitute the old, landed Palestinian elite. The new elite of the Palestinian Authority is often constituted of people whose family origin is in what is now Israel. The capital of this new elite is invested in activities, such as the casino in Jericho, that require water for domestic use, not for irrigation. The competition between water for irrigation and water for domestic use therefore often pits the new Palestinian elite against the old Palestinian elite.

**Water for Domestic Use**

As opposed to the water used for irrigation, which is managed entirely independently from the Palestinian Authority, much of the nascent state's involvement appears in the management of domestic water. In 1999, 35% of Palestinian used water was devoted to domestic use. The earlier sections showed how the Palestinian Water Authority faces local social forces, the spring shareholders and the well owners, if it wants to spell out the rules regarding the water now devoted to irrigation. Examination of the management of the water devoted to domestic use now shows the Palestinian Water Authority facing both national and local social forces. Many Palestinian villages and towns have a water reticulation network that is run by the municipality which belongs to the Ministry of Local Governments. The Palestinian Water Authority's plan, to build five regional water utilities throughout The West Bank, would wrestle the control of reticulation networks out of that ministry. This uphill battle is not yet won.

Many Palestinian communities are not yet connected to any reticulation system. The Palestinian Water Authority was reporting 151 such communities in 1999. The inhabitants of such villages purchase their water from water tankers, and so do the many inhabitants of towns and villages whose reticulation networks fail to provide a reliable supply of water. Extending its control over the price at which the water tankers sell the resource and to control the quality of what they sell represents another uphill battle for the Palestinian Water Authority.

In January 2001, the water tanker providing water to the village of Aqraba in the West Bank invoked the fact that a ditch had been dug in the road linking it to the neighboring village where it purchased the water as well as a price hike on that water in order to double its price. The inhabitants of Aqraba accepted it as a sad result of the uprising. Enquiry showed that the neighboring village had never hiked its price and that the trip to that village had only been lengthened by 50 meters. In fact, no control exists over the price practice by the tankers nor over the quality of the water they deliver.

**Competitions and Conflicts over Water**

Joel Migdal's State-in-Society model is very useful in order to examine the interactions between the Palestinian Authority and the various social forces that attempt to control water management in The West Bank.[15] In this model, the state is viewed in dual terms: the "idea of the state" and the "practices of the state". Often, a state's practices contradict its official policy. "(...) the state-in-society approach points researchers to the *process* of interaction of groupings with one another and with those whose actual behavior they are vying to control or influence. (...) The dynamic process changes the groupings themselves, their goals, and, ultimately, the rules they are promoting."[16] Migdal developed his model essentially in order to understand the states that arose from decolonization. New state leaders strove to impose one set of rules over the entire national territory. Their success has generally been elusive as formal and informal social organizations were reluctant at giving up their ability to devise rules. Instead, they joined forces with the parts of the state and developed practices contradicting the official laws and regulations of the state.[17]

This is exactly what happened in Jericho. In 1999, 943 persons had water rights over the Ein Sultan Spring.[18] These water shares were measured in time and concerned the length of time during which water was deviated, through the irrigation network, up to the plot of the water shareholder. These water shares varied greatly in size, from 32 hours a week for a very "water-rich" shareholder to two and a half minutes a week for a rather poor water shareholder. Ein Sultan Spring's flow was estimated to be 680 cubic meter an hour in 1998. The spring has traditionally served the inhabitants' domestic needs as much as they wished and the leftover water was channelled to the various plots of land via the irrigation network. The domestic use had long been negligible given the small population and the abundant flow of the spring. The share of water pumped by the municipality towards domestic needs reached an all time high of 300 cubic meters an hour in 1999. Indeed, the town's population had boomed with the arrival of the Palestinian Authority and the 1997 census recorded 14674 inhabitants. The farmers were still receiving the same water shares in terms of time, but much less of the spring's flow was allotted to them during that time. Jericho is a rare instance where the farmers do not control themselves the various deviations that will lead water to one plot or another. Instead, qanawatis who are hired by the municipality cycle along the various channels in order to proceed to the various openings and closures of the channels and thereby direct the water according to the schedule recorded in the municipality.

The farmers with the water shares can be considered roughly as the old landed elite, whose families were already living in Jericho before Israel ever came into existence. The new inhabitants who were creating an increased pressure on the spring's

[15] Joel S. Migdal, State in Society, Cambridge University Press, 2001.
[16] Ibid., p. 23.
[17] Ibid. p.49.
[18] Julie Trottier, op.cit., p.86.

water can be considered roughly as the new elite, whose capital was invested essentially in services, the most obvious ones being the casino and the hotels that sprouted up after 1994.

The farmers reacted to the situation by creating the Ein Sultan Water's Users Association (ESWUA) upon the occasion of an IFAD (International Fund for Agriculture Development) funded project.[19] They elected as a secretary general Daoud Erekat, a very respected and old time member of the PLO, who happened to be the cousin of Saeb Erekat, the Minister of Local Governments. The ESWUA obtained in 1998 decree no 38, signed by Y. Arafat, which grants it the responsibility of providing the Jericho Area with the necessary water in terms of drinking and irrigation water needs. This decree, published in Arabic, was in flagrant contradiction with the Palestinian water law in preparation, available in English. It reflected a compromise that the Palestinian Authority had to accept in order to appease a local social force, that of the Jericho landed elite, which wanted to secure its allocation of water for irrigation. The fact that the municipality declared in 1999 that it simply did not recognize this decree shows how far the practices of various state institutions can contradict each other, especially when the state is only building itself.

Migdal built his state-in-society model partly because he found Shils' model of center and periphery lacking. Indeed, Shils' model does not allow to understand the impact the periphery may have on the center. The periphery is rather presented as an amorphous and passive mass which only awaits influence by the centre. This is far from corresponding to reality. A nascent state faces many institutions that are already well established. These are social forces that react to whatever influence and control the nascent state tries to achieve. The various institutions of the state have to strike whatever compromise they can with these social forces.

The Palestinian state does not exist yet and its construction will have to go through all of these state and society interactions just like every other state born out of decolonization has had to do. A crucial competition has been waged in the West Bank since the arrival of the Palestinian Authority: who will be allowed to spell out the rules over how water is managed. Customary oral institutions have been spelling out these rules for much of the water now used by Palestinians. The Palestinian Authority cannot ignore these institutions. The present rebellion against the occupation has temporarily obscured this fact. The casino was bombed in the fall of 2000 and was no longer operating in 2001. The pressure on the water of Ein Sultan's Spring had receded and the farmers were obtaining more water within their share time. The issue of who should be allowed to determine how much water should be devoted to irrigation and how much to domestic use will unavoidably arise again in the future.

[19] A much more detailed account of the Jericho water competitions is given in Julie Trottier, Ibid., pp.85-94.

In Gaza, the Palestinian Authority has had much more fruitful interactions with farmers in order to bring in the nascent state's presence in determining which rules were to be used concerning water. The drilling of illegal wells proliferated in the year following the arrival of the Palestinian Authority. The increasing salinity of the groundwater in the Gaza strip shows how overpumping is rampant. Yet, seemingly in spite of all environmental common sense, the Palestinian Water Authority decided to start allocating permits for digging wells. Drilling a well in such a sandy soil is very easy and the authority was not in a position to apply a sanction to those who were doing so. Instead, it chose to examine requests for drilling permits and to meet farmers introducing such requests. The Water Authority employee would visit the field with the farmer and would try to find with him another solution than drilling a new well. In doing this, the Palestinian Water Authority started interacting with these very social forces Migdal refers to. The local social forces obtained a change from the nascent state as it decided to stop its freeze on drilling permits. But the water authority succeeded in introducing itself among the actors that spell out the rules on how water is managed.

**Bringing in the International Dimension**

The international dimension of the competition for water in The West Bank can only be considered against the backdrop of these other competitions opposing the Palestinian Authority and local social forces or opposing the Palestinian Water Authority and other ministries within the Palestinian Authority. Each of the local social forces mentioned earlier may at any time harness an alliance with an actor on the international scene in order to strengthen its position when facing the Palestinian Authority. This explains the sad waste that occurred when two pipelines where laid in parallel between Bethlehem and Hebron in 1998-1999. One was to be controlled by the Palestinian Water Authority and was funded by USAID whereas the other was to be controlled by the municipality of Hebron and was funded by the German bilateral aid.

**Dangerous Mechanisms**

The perception of the water situation in The West Bank as a mere binational competition pitting Palestinians against Israelis has brought about the existence of several dangerous mechanisms.

Pumping more water from Palestinian wells has grown to be considered a nationalist act. A European Investment Bank funded drilling project in the West Bank has now brought about the withdrawal of water at a rate such that it threatens the sustainability of the water resources.

Blaming the occupation as the only source of water problems for the Palestinians has prevented any examination of the processes whereby the local social forces involved

in water management could be integrated within the Palestinian Authority institutions. This is the very process of state building. It is painfully slow and requires long negotiations with the local informal institutions.

Local actors have been harnessing international donors to preserve their power over water, to preserve their capacity to spell out the rules. This also has participated to bringing about an unsustainable withdrawal from the aquifer.

## Conclusion

This paper aimed to highlight the need to understand the maze of interactions over many scales: local, national and international, concerning water management. These interactions are all at work simultaneously when a water conflict emerges. Focusing on one dimension, whether it be the international one or the local one, prevents us from perceiving many crucial cooperations or related conflicts that must be incorporated into any successful conflict resolution scheme. The various cooperations can be used as assets and the various competitions should be spotted early, when there is still time to turn them into cooperations rather than conflicts.

Any successful water management in The West Bank will largely depend on the recognition of the customary institutions involved in spelling out the rules concerning how water can be used, how it can be allocated and how it can be accessed. Any successful construction of a democratic Palestinian state will largely depend on how the Palestinian Authority manages to negotiate with these institutions and strike agreements that will benefit all parties.

Exporting an American water management system to the West Bank could not be successful because the power configuration concerning water is so different in the American West. However, the methodologies developed to explore the policy impact in either area can prove useful in the other. Such methodology needs to allow multiscalar analysis. It needs to allow the exploration of the intricate interactions between irrigators and policy makers and it needs to account for the role played by the relation to water in the structure of society.