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## *The Water Rights and the Water Wrongs in Palestine*

Some general statistics:

- Water covers 71% of the surface of the Earth
- A human body is made up of approximately 60-70% water
- A human can survive several weeks without food – however only a several days without water
- On average a human needs approximately 3 litres of water per day to survive
- Water is a vital aspect throughout the world and, amongst other things, is used for: agriculture; irrigation; cleaning; power generation; extinguishing fires; travel; and recreational sports.

To say that water is a necessary aspect of life is to greatly underestimate the sheer basic need every single living organism has for water. Water is the lifeblood of existence on Earth, without it nothing can survive. It is therefore understandable the social, political and environmental implications water has had on every society throughout history. This battle for an unremitting water supply continues in today's modern society. Technological advances have meant that water can be recycled and harvest in ways that were unavailable to previous generations. However, all the modern technologies still have not solved the water shortages that many areas around the world are subjected to - one such place is Occupied Palestinian Territories. This sentence conjures up two key focal points for this report – first and most crucial, is the term 'occupied'. The problems that Palestine face on a daily basis – have many overarching causes, but it will not be conjecture to state that the Israeli occupation that has existed for 40 years is the chief cause and initiate. The second focal point is that Palestine actually is fortunate to have quite a few natural water resources in its boundaries; it is not a country that should need water. However for reasons that will be discussed – Palestine is a country that is in dire need for a constant supply of water.

*'Israel recognizes the Palestinian water rights in the West Bank. These will be negotiated in the permanent status negotiations and settled in the Permanent Status Agreement relating to the various water resources.'*

(Article 40, Declaration of Principles/Oslo Accords)

In 1993 Israel and the Palestinian Liberation Organisation decided to try and end the years of conflict and confrontation that had blighted so many decades. They sat together and worked on the Declaration of Principles – commonly known as the Oslo Accords.



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These accords covered all manners of social and political issues<sup>1</sup>. One such issue was that of water rights.

The Oslo accords were set up, in principle, to allow both parties a chance at obtaining a normal, functional existence – together, whether this was by a reduction of security threats in of Israel, or with Palestine, an allowance to self-govern. Article 40 of the Oslo Accords tackled one of the most crucial problems that faced the two neighbouring countries – water rights. To sum, Article 40 stated that Israel has to recognise Palestine’s own water rights; co-operate to develop new water sources and to stop deterioration in existing sources; Palestine to be allowed access to a minimum of 70-80CM/per year; both parties to commit to additional water supplies throughout the West Bank; a formation of a Joint Water Committee (JWC).

These commitments were made in good faith, however over 15 years later still many of them remain unfulfilled. A key component to this is the unfavourable and unequal distribution of water between Israel and the West Bank. Research has showed that though they were promised an additional 70-80MCM of water for its futures needs, a continuous refusal by Israel to issue well licences has resulted in West Bank relying upon merely 16.7MCM being added to Palestine’s low total. Israel however is very quick to issue settlements the permits. In fact the settlements actually use 75MCM of water from wells *within* the West Bank. In fact rather gallingly – Israel actually sells 10MCM of water to Palestine that was originally sourced in the West Bank. The wells that have been developed account for little more than half of the foreseen level. There is total disparity between Israel and Palestinians access to water. Water availability per capita in Palestine is about one quarter of that available to Israelis or Israeli settlers that live on the Palestinian side of the Green Line. This is in total contradiction to the Oslo accords agreements.

Palestine has not seen much benefit from the Oslo Accords, the agreements were seemingly rushed past without topics such as water rights et al given much consideration, or experts listened to. The crucial figures were never really discussed, and definitely were not implemented. The rational and reasonable figure of almost 100 litres per person per day was a clear and important desire for many of the leading Palestinian water experts. Though the Israel agreed upon this statistic, today we are nowhere near to achieving that target, rather distressingly the actual target is around a net total of 60 l/d/c.

What does remain un-discussed is the role that the Jordan River plays in the water rights of Palestine. The Jordanian River is a key aspect to the supply of water to Palestine, however Israel still have full control over it, regardless of what policies or demands are set by the Palestinians, Israeli officials will reject it. Currently the statistics for the usage of the Jordanian river is that of all water sourced from the river 92% is used by Israel, 8%

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<sup>1</sup> For more information see the ‘Declaration of Principles on Interim Self-Government Arrangements - September 13, 1993’



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by Jordan and 0% Palestine. The Jordan River is vital to Jordan and to Israel and is obvious to see why it is a crucial factor in the conflict as a whole, but because of unwarranted usages of it – it is slowly shrinking, something that will be devastating for Israel and the surrounding Arab nations. Its pollution rate has also risen causing some of the water to be either useless or needing treatment. The water usage from the Jordan River is completely mismanaged - soon it will not be only the Palestinians who are unable to source this historic river.

One of the fundamental aspects of the Declaration of Principles was the development and initiation of the Palestinian Water Administration Authority; this was seen as a key factor for Palestine's water sustainability. However, the WAA did not occur – became merely the Palestinian Water Authority – an institution that was seen by many to be an ineffectual and corrupt institution, and one which is now seemingly futile and has no real power in the decision-making process of Palestine's water issues.

It is important to stress that there is no shortage of water within Israel and Palestine – in fact, it can be said that Israel is extremely wasteful with its water. The World Health Organisation (WHO) states that on average every person needs approximately 100 litres a day, but on average every person in Israel actually uses between 240-280 litres a day. Palestinians are far off this total. The problem lies in a *supply* shortage to Palestine. Israel controls nearly all of Palestine's water, and has continually refused to uphold its commitment to supplying Palestine with a regular supply of water. The contrast between the amount of water available to settlers in the West Bank compared to Palestinians, for instance, per head Palestinians get 80m<sup>3</sup> of irrigated water, compared to 300m<sup>3</sup> per head in Israel – just go to show exactly the biased treatment Israel continually employs. A net of just less than 100MCM is needed to guarantee that a supply of a hundred litres a day per person is available. As Palestine falls short of that number by almost half – it would be rather jolting to realise that in Palestine there is roughly a total of 125MCM available, more than needed to reach the minimum requirement. The overharvesting of water in the West Bank by Israel and Settlements is slowly creating a Palestinian Water infrastructure unable to develop and one that is very rapidly disintegrating.

It is not a general presumption to stress that the water control lies solely in the hands of Israel. It controls the majority of the aquifers in the West Bank, along with nearly all of the Jordan River – it has become increasingly apparent that the control of the water is in many respects a control of Palestine itself. As mentioned previously Israel overdraws the West Bank aquifers, this allows it to not only have as much water as it wants, but also leaves less for Palestine. Sources suggest that the Jordan River has been massively overused by Israel. Where the river used to flow with approximately 1300MCM annually, research shows that it now only flows with 100MCM water per year. One crucial instance of Israeli control is that Oslo allowed Israel to manage the main water supplies into the West Bank and only gave the Palestinian Water Authority minimal control over local, smaller sources.



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Israel's dominance in the water rights of the West Bank has been subject to many debates since the Oslo Accords were signed. It has been argued that as with the influx of settlements, the land confiscation and the building of the segregation wall – is all to allow Israel to have the greatest amount of supplies (land, water etc) to allow the 15million Jewish individuals around the world to relocate in Israel or the Occupied Territories. Though a rather negative ideology – it does smack with certain unalienable truths. Israel continues to defy the simplest of mandates set up in 1993, similarly the idea of a Joint Water Committee has become so toothless that the JWC is almost a pointless activity (to be discussed further). This is due to the constant vetoes, the raised prices, the overdrawing of the West Bank aquifers, the biased attitude towards Settlers in the West Bank water supply, the wastefulness of Israel, and more crucially – the continual denial to allow Palestine to control even the smallest amount of the Jordan River.

The three main aquifers in the West Bank has a potential production of 725.3MCM, however Israel only allowed limited supply of its own aquifers results in a mere 72.3MCM actually going to the Palestinians. Palestinians are also regularly denied permits to allow the building or renovating or water systems. Against international law the Military of Israel are allowed to overrule decision made by the civil court. So even if building permits are approved they can still be blocked for military reasons, often without any explanations. Or rather strangely it has been noted that sometimes Palestinian drilling permits have not been approved because the courts believe that the areas 'may' be used in the future for illegal Jewish Settlements. In other words Palestinians are denied a more plentiful supply of water on the grounds that they might be driven out of the by Israeli settlers. This seemingly is one idea that is loaded with negative, sensationalist concepts.

Colonisation is a strong word, and one that should not be taking likely. However, the actions of Israel with regards to water in the West Bank show all the signs of a colonising country. A failure to deliver the promised water data and statistics to their Palestinian counterparts allows them to hold a power over Palestine. Similarly is not fulfilling the promise to transfer control for many projects within 18 months of the Oslo Accords. As is their claim that they have built a desalination plant in Hadera solely for the Palestinians, however, the PWA wholeheartedly deny this. Even more galling is the fact is the Israeli officials claim that the Palestinians cannot treat their own water. However the standard they have set (10:10BOD COD) is far too high – there are arguments that this is merely a rouse, as they then treat Palestinian's water themselves and then sell it back to the West Bank authorities at 25cent for every treated cubic metre.

Through the total dominance of Palestinian water supply, Israel has created a region that is totally dependent on another. This has severe repercussions on many different aspects of the Palestinian society. Many Palestinians are not privy to a constant water supply from Israel, even though as mention previously the stock is actually plentiful. Most residents have to live with many days without water at all, and rely on backup water



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tanks. More exasperating, still, even 15 years after the Oslo Accords, still nearly 10% of all of Palestinians are not connected to a water supply at all – this is proof that the supplication for more equal water measures has not only not been fulfilled but it can be argued that no endeavour, on the Israeli part has been taken at all. Israel's grip has been getting tighter and tighter, there is a very good chance that small actions will be taken, but whether these are forward steps or merely superficial exploits is very difficult to tell.

### *Palestinian Authority*

The blame cannot however fall solely on the actions committed by Israel. The Palestinian Authorities have also played a fundamental role in the crisis that has affected many individuals in Palestine. The PWA has become so powerless that there has been rather damning reports of incompetency, corruption and larceny. For a successful water authority and one that is respected and has a major influence, cases such as the theft of water from Mekorot (Israel's biggest water supply), the illegal drilling that continues in the West Bank that continue to go unpunished, and cases of corruption, need to be stamped out immediately. Similarly the debt that has become a major burden for the WA has to be remedied. Bethlehem alone has accrued over \$65m in debt; this is unacceptable for a supposed legitimate institution. Only when these problems are tackled by the PA, will the Israelis be willing to listen to the concept of collaboration. It is solely up to the PA and the WPA to stamp out these issues instantaneously.

### *Joint and International Response*

The JWC was set up in 1993 at the Oslo Accords as a way to allow both sides to undertake the water based agreements together. Together they would co-ordinate the necessary plans to allow both sides to achieve a higher successful outcome in terms of the water rights. This included; protection of water resources; joint effort in overseeing operations; resolution of water disputes; and a sharing of all information. On the face of it the JWC was a pioneer in the necessary dialogue that many believed was missing and would be key to the development of equally water rights between the two conflicting neighbours. However, much like the individual parties the co-operation between the two also failed to live up to the expectations set. 15 years later, the JWC is almost dead in the water.

The original idea was set up to manage all water issues, but mainly focus upon the idea that the shared aquifers should be managed more efficiently and equally – and also to make sure Palestine received the extra water that was so desperately needed. As it became apparent that these issues were very difficult to achieve, and almost impossible to achieve in the current climate, both sides of the JWC began to realise that this was a fruitless endeavour and slowly began to remove themselves from the commitment of that was put for by the original Oslo Accords. This is none more apparent in the fact that at the peak there was 10 JWC meetings a year, attempting to tackle all the necessary water



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issues, throughout the 15 years since 1993 there has been a continual lull in the organised meeting, poignantly resulting in 2008 having only a single meeting. It must also be noted that Israel has the potential to revoke any projects or proposals at three separate levels. They also can veto proposals that only concern the West Bank, something that is obviously not reciprocated. Similarly all 14 departments in the civil administration sector in the JWC need to approve every project that is posited, this not only leads to major delays, but also in some cases a complete rejected of what would be perfectly adequate proposals.

The attendance of the JWC served merely as a statistic to what was a more crucial failure of the committee – implementation. Throughout the period the JWC has been formed, its implementations on projects, proposals or other initiatives have increasingly slipped further and further. The JWC has only carried out 32% of the total projects based around resourcing water through drilling, that have been put towards them. Even more concerning is that, a key part of the Oslo Accords, Sewage and Wastewater, of the 16 projects based around this subject that have been proposed, only 1 have actually been fully implemented. In fact, of the 417 total projects that has been put forward for funding and implementation a mere 57% have been approved. The small total of 57% has resulted in only \$60.4m begin used as projects to help the management of the water; this is from a possible total of \$121m. It is obvious to understand that projects can be rejected, especially if the donors do not have the money, or authority to give the proverbial green light. But when it was agreed that the JWC should aim to achieve at least \$180m of donor funding per year, the statistic not only become alarming, and saddening, but somewhat baffling as well.

These statistics have ultimately led to a certain fact. A lack of projects as a whole will not only stutter any forward motions in water management and rights – but also could have a severe detrimental effect on the whole region. An inability to resolve the basic problems and create the simplest solutions has meant that the JWC is losing rapidly any strength it has in the water conflict between Israel and Palestine, that is if it has not lost it already, or had much strength in the first place. What is worse, as what seems like a symbolic gesture of a dying organisation the JWC have begun to claim that it is the fault of the Palestinians for the regions polluted water – even though this is erroneous (what about all the pollution caused between 1967- 1994? where the Israelis?) – It also shows the obvious negative effects the JWC has had on Palestinian water causes.

### A Bright Future!?!

What is a crucial implication to a successful collaborate future is Israel's recent decision to close the Dead Sea to Palestinians. This unfortunately has cast a severe doubt over the legitimacy of the supposed fair and equal projects. If the Dead Sea is really closed to Palestinians it is hard to see the real, life changing benefits that the local Palestinian economy can achieve.



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What needs to be set are some basic standards or targets that – for whatever reason – were not implemented in 1993 or followed through in the preceding 15 years, of course availability of water is a crucial factor but it does not stop there. There needs to be a re-examining of the waste treatment works in the West Bank, and making sure with co-operation between Israel, Palestine and the International Community all are working to a minimum standard. Of course the ideal goal is that in the future there will be no cesspits at all, using treated water for irrigation is also a key factor. Similarly there is dire need for further discussion on climate change as there has been a 15% decrease in precipitation in the West Bank, which has severe consequences of the water in the region.

New concepts needed to be looked at, such as an increase rain water harvesting. This can be done in many ways, such as the rejuvenating of the ancient Roman Wells that dot the Palestinian landscape. Here we have equipment already in place that could drastically help the collection of rainwater.

In the early 1990s an idea of a \$21b project called the ‘Ozal Turkish Peace pipelines’ was proposed. This project was initiated to allow for Arab nations and Israel to receive water from Turkey. Though the idea was met with many detractors, many who believed the desalination of water to be a cheaper alternative – it is still a valid idea to help ease the water issues within Palestine and the Arab land as a whole. Similarly, concepts such as setting up generators at the Dead Sea in order to supply Gaza with the electricity it so desperately needs.

There is seemingly an endless amount of creative schemes that have been proposed for the enhancement of water supply in Palestine, these include: Large-scale desalination projects, often linked with hydro-electric power generation in the areas surrounding the Red and Dead Sea; Water diversion projects in Lebanon, Turkey, Egypt, Israel and Gaza – with pipelines running from the major rivers; water conveyance through oil tanker conveyance from Turkish, Yugoslavian, or other supportive water sources.

What needs to be recognised is that idea of equal sourcing of the Jordan river should be top priority – all other projects such as the idea of building enough cisterns in the region are too expensive for now (Palestinians pay \$2500 for a cistern that holds 100MCM – which means the it will cost \$250m for the sufficient number of cisterns, an almost unachievable target, for the near future at least). Therefore what needs to be stressed is the proposals that will help Palestine source the water it needs, and also give it sustainable living. These proposals can include a challenge to Israel to show that it is really committed equal water management. At the same time initiate proposal that with greatly help the water insufficiencies of Palestine. These can include a lifting of the restrictions on the Dead Sea and the Eastern side of the West Bank, and crucially (as mentioned previous) a propotional share of the Jordan River. Intertwined with that idea – Israel needs to grant Palestinians the right to build whatever they want on the waterline of



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its part of the Dead Sea and Jordan River – this can include Hotels and other tourist facilities – all of which will aid the growth of Palestinians economy. Finally allow permits to build houses in these areas for the hundreds of thousands of displaced refugees to return, live and work within the West Bank.

The interests of both Israel and Palestine are clearly not mutually exclusive. As neighbours share common goals and ideas that can - given the right environment - allow for a phoenix to rise from the ashes of 1993. It is an obvious statement to suggest that both sides are equally affected by the negative implications the water rights issues has. They are suffering for a lack of transparency, clarity and crucially predictability. Neither side really know, nor understand what the future holds for the unsettled water issues. However, this being said – the power of course lies firmly in the hands of the Israelis. But a reluctance on their side to change any of the policies that have been implemented, or carry out any of the agreed upon policies of the Oslo accords is the bugbear of a future water settlement. What is needed is for Israel to realise the *benefits* of co-management, that to work with the PWA is in some way aiding, and not hindering Israel's development. This of course is a difficult task, but one that is not impossible – with support from the international community, and a re-commitment from the JWA, Palestinian technologies, tools, and information could easily have parity with their Israeli counterparts. This will allow not only Palestine to develop and re-develop its water based expertise – but also show to the Israeli's that working with Palestinians, as joint partners, would be extremely productive.

Whether or not this would be a successful pursuit remains to be seen, but what it will allow to do is achieve the most important problem, Palestinians lack of water rights. To accomplish this key dialogue has to be opened, which include *all* important players, Israel, Palestine, International Communities, Experts, Donors, Politicians. All bases have to be covered – only by doing this will it allow for a more transparent, simple and crucially – equal negotiation. It is up to all parties, but in particularly, the international community to realise the need for pressure for water rights – they need to take action on the obvious unfair policies undertaken by Israel. A perfect example can be that it is claimed that Israel has imposed its own much higher effluent standards through the JWC – whereas international water experts believe that this is unnecessarily high. These obvious disparities and clear misnomers on Israel's behalf is where the international community can exert pressure and persuade Israel to rethink, rework and remedy its previous biased policies. However this is not merely pressure not on the Israeli side to relent, but also a pressure on all players to commit to past policies and any future policies that may be designed.

Currently Palestinians are feeling the severe affects of the abrupt failure of the Oslo Accords Article 40 – water is in short supply, and any water that is available is astronomically high in price. This is where the realisation of just exactly how the key actors in this conflict is most apparent. Water first and foremost needs to become



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regularly available, at a reasonable price – this of course, is a bare minimum to and future dialogues, it is so basic it is almost abhorrent to believe that it has continued with no apparent ratifications for over 15 years.

Water rights between Israel and Palestine are in dire need for a reassessment. The key player are clearly aware that the Oslo Accords, that were fundamental pro-Israeli in the first place have become almost a comical mandate with regards to water. The small number of policies that were implemented in 1993 in favour of Palestinian rights – have been systematically rejected or unimplemented by Israel. Institutions and Organisation that have surrounded the issues have become mere pawns of Israel's continued dominance. The International Community along with the JWC have no power whatsoever to remedy the fundamental flaws that ravage the management of water in the area. This is to say that Palestine and the PWA fair no better. There, first of all acceptance, of the Accords that were so clearly unfavourable to their water rights, was merely the catalyst that created a Authority that was powerless, wasteful, incompetent, languid and corrupt. From the start the Palestinian's requirement and wants were not listened to, however – it can be said, that the inactions of the key players, and the corruption of the PWA has made matters for the average Palestinians a whole lot worse.

What is needed is a collaboration to work towards a systematic approach in the development of both parties. This mutual understanding is a extremely difficult task, especially because of the current political ideologies from both sides. However, it is what is needed if Palestine is to gain the equality it so desperately needs, wants, and more importantly is entitled too. The Irony of it all is that proportionally water is more important to Palestine than Israel. It is a key feature in the massive agricultural sector. Though, of course, important to Israel as well, too the that country that does have the endless supply of water and total control over all the rights of the aquifers and other sources – water has become less a vital acquirement – but merely a certificate of dominance and power over its increasingly impoverished neighbour. Until Israel realises that these selfish, and negative actions can have such catastrophic consequences for all players, the unequal water rights will continue. Water is the lifeblood of every society. It is up to all key players to co-operate and allow Palestine to live. However, at the recent 'World Water Forum 2009' in Istanbul – Israel reiterated its commitments to supplying Palestine with its *water needs* but no mention of giving Palestine its *water rights*. This continuation of attitude by Israel has severe consequences of a just plan being drafted anytime soon. It is unfortunately and very worrying as the politics of water rights between Israel and Palestine is in dire need of a complete overhaul and rejuvenation, as it has become, for want of a better word, - stagnated.