



CEMOFPSC SEMINAR
Women's participation in water access and
management:
"The case of Palestine"



Water resources in Palestine

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Thank you very much Isabel for the introduction. Brothers from the Palestinian Embassy in Spain, thank you very much for being with us today. Thank you very much ladies and gentlemen for finding the time to come and participate in today's talk about a very important issue related to Palestine. Just before starting my presentation, I myself, and on behalf of my colleagues at the Palestinian Agricultural Development Association (PARC), and on behalf of the beneficiaries including marginal farmers, I'd like to sincerely express my thankfulness and deep appreciation to the people and the Government of Spain for their endless support to Palestine. Indeed during the past ten or fifteen years the generous support from Spain has shown and is still showing tangible outputs in Palestine, and this output actually has been positively reflected on farmers. Today I'm going to talk briefly, because of time limitations, about two main subjects.

The first subject is about water in Palestine; I'm going to talk about resources, rights and challenges. And the second part of my presentation we are going to look at the joint collaboration within the FPSC-PARC 4-year project.

According to the annual Palestinian Status of the Environment report it was clearly stated that the Israeli occupation is the reason behind the severe water shortage in Palestine. And if we have a look on this figure here, a Palestinian citizen is consuming less compared to an Israeli one. One may say: "How can you compare water demands in a developed country like Israel with a donation driven country like Palestine?", but we can discuss about this issue later.



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We know that the Palestinian rights in their water were clearly stated in the Oslo Peace Agreement and we hoped that within the permanent status agreement this issue would be completely resolved. Sadly and unfortunately, what happened was not what we expected and hoped.

There are two main sources of water: the first one is groundwater, and it comes from aquifers. We have the coastline aquifer, western, eastern, north-eastern, and desert aquifers in Palestine. This table shows on the right the annual amount of rainfall and the corresponding recharge in million cubic meters (MCM). The table below shows, according to Oslo Agreement, what the Palestinian should take and what the Israeli should take. Now, the Israelis are over-pumping the ground water and this is a dangerous situation of renewable water resources and for sustainable development of water resources. To make it much clearer you can look at the Israeli extraction of water and you can see that Israel takes the lion's share. We are using more water than it comes from rainfall, so we are damaging our aquifer system. Now, let's have a look on the ground wells in two governorates: Qalqillia and Tulqarem. I think most of you could tell me what is the difference between Israeli wells in red and Palestinian wells in green in terms of depth and extraction amount. It's clear that Israeli wells are deeper and should yield more and better. On the other side, the Palestinian wells are shallower and yield less, so doubtlessly they will be exposed easily to contamination.

The second source of water in Palestine is the Jordan River, the Jordan River actually forms the boundaries between Israel, Palestine, and Jordan, and it's the point of conflict between the neighboring countries including Syria and Lebanon. Just have a look on this figure below, which is the river flow in 1950, it was 1400 MCM. Recently it is 30 MCM and what is the reason? The reason behind this is that Israel has implemented and installed a national carrier which diverts the water from the Jordan River to the southern parts of Israel. In spite of the fact of that Palestinian springs feed the Jordan River, Palestine among all these countries is the only one that receives nothing from the Jordan River. In such a situation the Palestinians are asking for their water rights; the Palestinian National Authority is asking the international Community to remind Israel for its commitment and obligations based on the Oslo Peace Agreement. This is on the international Community level, but also other events in Palestine were organized targeting this issue, and one of these events was the 2nd International Conference on Rights and Values of Water. It was a very interesting event because parties, the scientists and politicians, discussed water rights and they come up with the final conclusion, which is very important for the donor community to solve, in Palestine we are in bad need for not only a technical support in the field of water, but political support is needed as well.



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Until we reach a peace agreement with Israel, we have sources that we should consider such as wastewater. The treated wastewater reuse a key option and a low-hanging fruit in Palestine. As you can see, the generated amount is very huge and could be used easily, and we want to address reusing the treated wastewater not only to protect groundwater resources from contamination, but also to save money because the Palestinian Authority has to pay annually a large amount of money to Israel for treating the wastewater from the West Bank, and the amount of this payment is yearly increasing. We need to address this issue just to save money. This gives you an idea that Israel charges Palestinian Authority around half US dollar for treating each cubic meter of wastewater. A large number of small scale wastewater plants have been implemented with the support from the national and international NGOs during the past ten years In Palestine.

Another key option for integrating water resources management in the region is rainwater harvesting, small scale or large scale, and you know it's a very important source but still, we need to address this more carefully because people in Palestine are ready to use harvested surface runoff or rainwater, but they are refusing to reuse treated wastewater. They think that the harvested rain water is cleaner compared to the treated wastewater, but it is not always true. Treated wastewater could be safer than collected surfaces runoffs from streets and roofs.

I will move to the second topic of my presentation. It is about the four-year project collaboration between FPSC and PARC in Palestine. The main objective of the project is to develop the land and water resources in Palestine, targeting poor communities. The budget is almost 2 million EUR and it is targeting Tulqarem and Qalqilia. The targeted groups in Palestine are farmers in both rainfed and irrigated agricultural lands, rural woman, and unemployed workers. The main interventions within this project involve two components, hard component and soft component. The hard component related to development of lands, roads, wastewater treatment, and irrigation networks and so on. The soft component, which is very important, is about capacity building of the farmers, targeting especially the women in these areas and the training of farmers about environmental friendly practices and climate change adaptation among those farmers. The project succeeds in changing land uses so crops could be planted, but there is a challenge.

Most of our activities are implemented in area C in Palestine where Israel does not allow in these areas the use of machines. Lots of roads were rehabilitated just to make the access of farmers to their land much easier. This is mainly to change the rain fed lands into irrigated ones. But if you change a land from a rain fed one to an irrigated one you have to secure a water supply. You can't change the land without securing a water resource. The project will not be sustainable if you don't promote techniques and applications that save water as well. So this is one example of what the project has implemented by just improving the irrigation networks,



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implementing or introducing irrigation techniques to save water as a matter of adaptation to climate change in this region. There are a number of wastewater treatment plants and now it's time just to let the people, to teach the people, to show the people how to use this valuable resource in irrigation.

Now going to the soft component of this project; lots of trainings, lots of workshops, targeting women cooperatives and farmers, just to show them, and let them know more about all these interventions. Women involved in all components of the project, even if it is related to water conservation they are there. It's nothing new for the women cooperatives in Palestine. Previously they used to sell their home products and homemade products, but this project is improving their capacity, just to widen their markets and to generate more income. You can see many successful stories in PARC's facebook showing that women in Palestine can do better. They can generate their income from their home gardens, and they can sell and support their families.

Of course there are many challenges in this project, just few weeks ago a team from Spain and the Director General of PARC visited the site and saw what kind of challenges the Palestinian farmers are facing. Simply, on those C areas farmers can receive an order from Israeli defense forces not to access or to do any activities. That's one kind of obstacles we are facing in this project.

Finally, most of you know the old Chinese saying which is "Don't give me a fish to eat but teach me fishing". Well, in Palestine it's difficult to say so, in our situation under occupation, we just say, "give me the fish and teach me how to catch fish". We hope one day there will be peace, we know very well that no occupation will last forever. There will be a peace agreement one day and the Palestinians will get their rights in their water. Again thank you very much for coming. Thank you very much to the FPSC for collaborating with us within this project.