

Finding Common Ground Amid Conflict

An Evaluation of the Al'Auja-Arava Valley Initiative – A Cooperation between Palestinians and Israelis on the Water-Energy-Food Nexus



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List of Acronyms

AAVI	Al'Auja-Arava Valley Initiative
AIES	Arava Institute for Environmental Studies
AU	American University
BIP	Build Israel Palestine
HUGE	Human, Gender, and Environmental Security
ICA	Israeli Civil Administration
IEC	Israeli Electric Company
IWA	Israeli Water Authority
JWC	Joint Water Committee
MCM	Million Cubic Meters
MECA	Motivations, Expectations, Concerns, Aspirations
NGO	Non-Governmental Organization
OCHA	United Nations Office for the Coordination of Humanitarian Affairs
PA	Palestinian Authority
PV	Photovoltaic
PWA	Palestinian Water Authority
PWEG	Palestinian Wastewater Engineers Group
SLF	Sustainable Livelihoods Framework
UN	United Nations
USAID	United States Agency for International Development
WWTP	Wastewater Treatment Plant

Executive Summary

Now in the eighth year of their partnership, Arava Institute for Environmental Studies (AIES) and the Palestinian Wastewater Engineers Group (PWEG) have worked together on multiple water-energy-food nexus projects, which we collectively refer to as the Al'Auja-Arava Valley Initiative (AAVI), concerning the interconnected issues of food, water, and energy in Israel and Palestine. The partners have previously worked together on decentralized wastewater management systems in the West Bank.

The AAVI has expanded to include a solar energy project and a project that focuses on people-to-people engagement. These projects primarily impact members of the date farming community in Al'Auja and the Arava Valley. They are undertaken in partnership with the US-based non-governmental organization (NGO) Build Israel Palestine.

The following report details the 2016 American University practicum team's findings, analysis and recommendations based on a rapid appraisal assessment of the key actors of the AAVI conducted in June 2016. The report also includes in-depth research on how a conflict setting affects the environment, livelihoods, identities, gender, and alters the significance of civil society action.

Methodology

Our team's central research question asked:

What are the development and peacebuilding-related motivations, expectations, concerns and aspirations of Palestinians and Israelis who cooperate on a food-water-energy nexus project?

A rapid appraisal assessment was performed to identify areas of synergy and divergence among stakeholders in the AAVI. Our team gathered information through interviews conducted over a two-week period with stakeholders in Israel and the Palestinian West Bank.

A data collection matrix was used to organize stakeholders' motivations, expectations, concerns, and aspirations (MECA) according to our team's conceptual framework. The intent of the MECA analysis was to find areas of common ground and divergences between the stakeholders to identify possible opportunities and threats to the AAVI.

Findings

Synergies

- **Equal distribution of benefits is desired across actor groups.** The Al'Auja farmers want to see AAVI benefits more equally distributed within their community. Israeli agriculturalists want AAVI benefits to be more equally shared between themselves and the Al'Auja farmers.
- **Environmental action around shared community-centric concerns can be scaled up.** In the future, AIES and PWEG both hope to build capacity in the community of Al'Auja so

that AAVI participants are capable of maintaining and expanding the benefits they receive from the initiative.

- **The initiative partners share similar long-term financial aspirations that can be better aligned.** An AIES representative relayed a desire to have a larger portion of project funding dedicated toward implementation rather than assessment efforts. PWEG is focused on securing funding for additional technical projects. Each NGO sees the other playing an important role in the achievement of its financial goals.
- **Politics are to be avoided and peace is an afterthought.** There is a striking synergy across principals who wish to avoid political entanglements believed to impede progress. For a majority of interviewees, peace is not the primary expected outcome of the AAVI, despite the initiative's strong emphasis on forming people-to-people connections between the two sides in the conflict.

Divergences

- **Actions toward a transboundary date co-operative or shared date branding need to be approached with caution.** While multiple stakeholders expressed an interest in joint branding or selling of dates, such a pursuit would need to be carefully reviewed to ensure the endeavor was not connected to Israeli settlements in any way.
- **Israeli initiative participants may be navigating competing goals.** Within the AAVI, Israeli agriculturalists are asked to cooperate and even share their knowledge with Palestinian farmers. In some cases, however, some Israelis are reluctant to share advanced farming techniques. Finding participants who agree to openly share information and expertise to build Al'Auja farmers' capacity will be paramount in moving forward.
- **Both Israeli agriculturalists and Al'Auja farmers are concerned about stable date market pricing, but for different reasons.** Some Israeli agriculturalists fear that an advanced Palestinian date sector will present market competition to Israeli dates. Farmers in Al'Auja are concerned that a lack of standardization in local date production practices negatively impacts the price they can get for their fruit.

Unexpected Findings

- **There is support for a counter-narrative to the conflict.** The most salient motivation expressed by AIES is the desire to present an alternative narrative to the Palestinian-Israeli conflict. International donors are intrigued by the notion of a counter-narrative. This presents an opportunity that the partners can explore further.
- **Even non-project actors with competing interests find common ground.** This particularly applies to the Palestinian Water Authority (PWA) and the Israeli Water Authority (IWA), whose commentary on the challenges of shared water management revealed a surprising degree of overlap between the two groups' perspectives.

Recommendations

Improve the AAVI in Al'Auja

- ***Create Capacity Building Mechanisms to Improve Agricultural Output and Economic Performance.*** AIES and PWEG should provide the Al'Auja farmers with support in developing their capacity to store and refrigerate dates as well as their ability to effectively market their products. This would involve both technical support and capacity

building workshops or trainings. Our full report provides a list of topics that could be explored in workshops for the farmers, including marketing and sales, accounting and finance, and date production and packaging.

- ***Determine and Create the Ideal Type of Co-Operative for Al'Auja's Farmers.*** PWEG and AIES should conduct a co-operative feasibility study to determine the best type of co-operative for this group of farmers. Multiple farmers indicated that they would be interested in participating in a co-operative that allowed farmers to sell together instead of against one another, but it remains to be seen what kind of co-operative would best meet farmers' needs.
- ***Ensuring Equitable Distribution of Benefits Within Al'Auja.*** AIES and PWEG should ensure that their investment is spread throughout the Al'Auja community in order to distribute benefits as equitably as possible. The AAVI has created gaps between those farmers who have benefited from the initiative and those who have not. Where infrastructure expansion is not an option, benefits may be more evenly distributed through capacity building workshops and inclusion of all interested farmers in the formation of any future co-operative.

Build the Israeli-Palestinian Partnership Among Farmers and Agriculturalists

- ***Reinforce People-to-People Engagement Between Palestinian Farmers and Israeli Agriculturalists.*** AIES and PWEG should create another opportunity for Al'Auja farmers and Israeli agriculturalists to engage with one another. The two NGOs should also focus on building a constituency of Israeli agriculturalists who truly want to participate in an engagement opportunity with Palestinian date farmers.
- ***Create Equitable Distribution of Benefits Between Palestinians and Israelis.*** If AIES and PWEG continue to focus their initiative on members of the farming communities, they must consider how to change the Israeli agriculturalists' perception that they have little to gain from participating. The AAVI currently distributes benefits unequally between Palestinian and Israeli farmers; if this imbalance is not properly addressed, Israelis may lose interest in the initiative, and it will be difficult to attract new Israeli participants.
- ***Consider, Under Specific Conditions, Joint Branding of Dates.*** Since there is value in pursuing a joint effort between the two agricultural groups, we recommend that AIES and PWEG cautiously explore the option of jointly branded dates. Joint branding could provide benefits to both sides, but the NGOs must take care that such a project does not involve any organizations that represent settlements.

Widen Out Engagement in the AAVI

- ***Incorporate Women and Gender into the AAVI.*** AIES and PWEG should explore the possibility of adding a gender dimension to their initiative by first conducting a gender sensitivity assessment. The assessment will determine where it would be appropriate and feasible to formally include women in the AAVI. Depending on the results of the assessment, we recommend that AIES and PWEG design a gender strategy that responds to the local community's areas of need.
- ***Build Partnerships with Schools.*** AIES and PWEG should reach out to schools in Al'Auja and the Arava Valley to explore the possibility of bringing youth into the AAVI in order to create a more well-rounded, sustainable initiative. Youth involvement could take many forms, and we encourage AIES and PWEG to investigate possibilities to engage children through environmental education.

Chapter 1 | Introduction



Photo Credit 1: Bridget Cooney
Photo Credits 2 & 3: Mattie J. E. Rush

Chapter 1 | Introduction

The 2016 American University (AU) Practicum Team is pleased to present our report on the ongoing cooperation between the Arava Institute for Environmental Studies (AIES) and the PWEG.

Now in the eighth year of their partnership, AIES and PWEG have worked together on multiple projects concerning the interconnected issues of food, water, and energy in Israel and Palestine. Much of the non-governmental organizations' (NGOs') cooperation has revolved around the Al'Auja community located in the Jericho Governorate of the West Bank. For the past four years, AU in Washington D.C. has been invited to send a practicum team, led by Dr. Eric Abitbol and Dr. Ken Conca, to evaluate the development of the partnership and make recommendations for its improvement. While in past years the practicum teams have focused on a domestic wastewater systems project between AIES and PWEG, this year the partners added two new, interconnected projects that significantly expand the scope of the AAVI. Together these two projects promote both development and peacebuilding. While these projects were begun in cooperation with the American NGO Build Israel Palestine (BIP), the AAVI will continue beyond the original scope of the BIP program. This report analyzes the AAVI's most recent projects to help inform the initiative's future trajectory.

The first project focuses primarily on development. It is a solar energy project intended to directly address the material needs of farmers in Al'Auja. In consultation with date farmers in the Al'Auja region, the project identified high energy costs as a major challenge to local farmers. In order to access underground water sources, farmers use pumps powered by electricity, the cost of

which constitutes a major part of their monthly expenditures. The BIP project installed photovoltaic (PV) panels intended to defray the cost of pumping water for agricultural use in Al’Auja.¹

The second new project aimed to establish people-to-people connections by bringing together Palestinian date farmers from Al’Auja with Israeli agriculturalists^a from the southern Arava Valley to exchange knowledge about farming practices. The two main purposes of this project were to foster new relationships between Israeli and Palestinian farmers and to build – primarily Palestinian – farmers’ capacity through exposure to new technical and organizational practices.

1.1 Purpose and Objectives

The 2016 AU Practicum Report is intended to inform the strategic and operational planning processes undertaken by AIES and PWEГ as they move forward with their partnership. This year, our team’s major objective was:

To analyze the development and peacebuilding-related motivations, expectations, concerns and aspirations of Israelis and Palestinians who cooperate together on a food-water-energy nexus project in the Middle East.

The primary data for this analysis comes from interviews conducted with various project stakeholders in June 2016, when the team traveled to Israel and Palestine to perform a participatory appraisal. Interview subjects included government officials, members of civil society organizations, and private-sector actors.

1.2 Organization of the Report

Following this introduction, this report is organized as follows:

- Chapter 2 presents the context of the partnership between AIES and PWEГ
- Chapter 3 introduces our team’s conceptual framework

^a Because several Israeli interviewees were involved in the date industry but were not farmers per se, such interviewees and Israeli farmers are referred to collectively as “agriculturalists” in this report.

- Chapter 4 explains our team's methodology
- Chapter 5 describes our team's findings
- Chapter 6 lists our team's recommendations based on the findings; and
- Chapter 7 concludes the report.

An aerial photograph of Jerusalem, Israel, featuring the Dome of the Rock in the foreground. The mosque's large, golden dome is prominent, surrounded by blue and white tiled walls and a minaret. The background shows a dense urban landscape with numerous buildings and greenery, extending to the city's outskirts under a clear sky.

Chapter 2 | Context

Chapter 2 | Context

2.1 Introduction

This chapter's main objectives are to situate the partnership between AIES and PWEG within the relevant historic and political context and to lay the groundwork for subsequent evaluation of the effectiveness of the partners' most recent projects. This chapter begins with an overview of water as a resource in Israel and the Palestinian West Bank. The next section gives a brief history of Israeli and Palestinian relations in terms of territory and water access over the past 25 years. This section presents the current power asymmetry with respect to territory and water management in the West Bank. The chapter then examines the Al'Auja region to provide context for where the majority of the partners' initiative took place. From there, the chapter shifts to a discussion of the separate projects of the AAVI and how they serve to empower Palestinian farmers in the West Bank town of Al'Auja. Finally, the chapter concludes with AIES and PWEG's theories of change as they relate to how the partners modeled their initiative.

2.2 Water Scarcity

The primary freshwater sources for Israel and Palestine are the Jordan River Basin, the Mountain Aquifer, the Coastal Aquifer, and more recently, the desalination plants Israel operates along the Mediterranean coast.² The Lower Jordan River flows south from the Sea of Galilee in northern Israel to the Dead Sea.³ The Lower Jordan River Basin is affected by the Israeli National Water Carrier, which diverts around 400 million cubic meters (MCM) from the Sea of Galilee and distributes it throughout Israel.⁴ The Mountain Aquifer is the main groundwater resource for the West Bank and western Israel, and the Coastal Aquifer is the primary source of groundwater for communities along Israel's Mediterranean coast and Gaza.⁵ The Mountain Aquifer is accessed via wells and natural springs, some of which only flow during the rainy season. Since about 80% of the

Mountain Aquifer's annual recharge comes from precipitation that falls within the West Bank, there is a contested political element regarding access to the Mountain Aquifer.⁶ Additionally, the aquifer suffers from groundwater pollution, which puts the entire water source at risk.⁷ Rainfall has decreased in both Israel and Palestine, especially in the Jordan Valley, where it has dropped from 1,350 MCM in 1998 to 1,175 MCM in 2014.⁸ As the West Bank's water resources are recharged primarily through rainfall, this decrease exacerbates Palestine's critical lack of water access.⁹ Palestinians in the West Bank on average have access to only 73 liters of water per day, well below the 100 liters per day recommended by the World Health Organization (see Figure 1).¹⁰

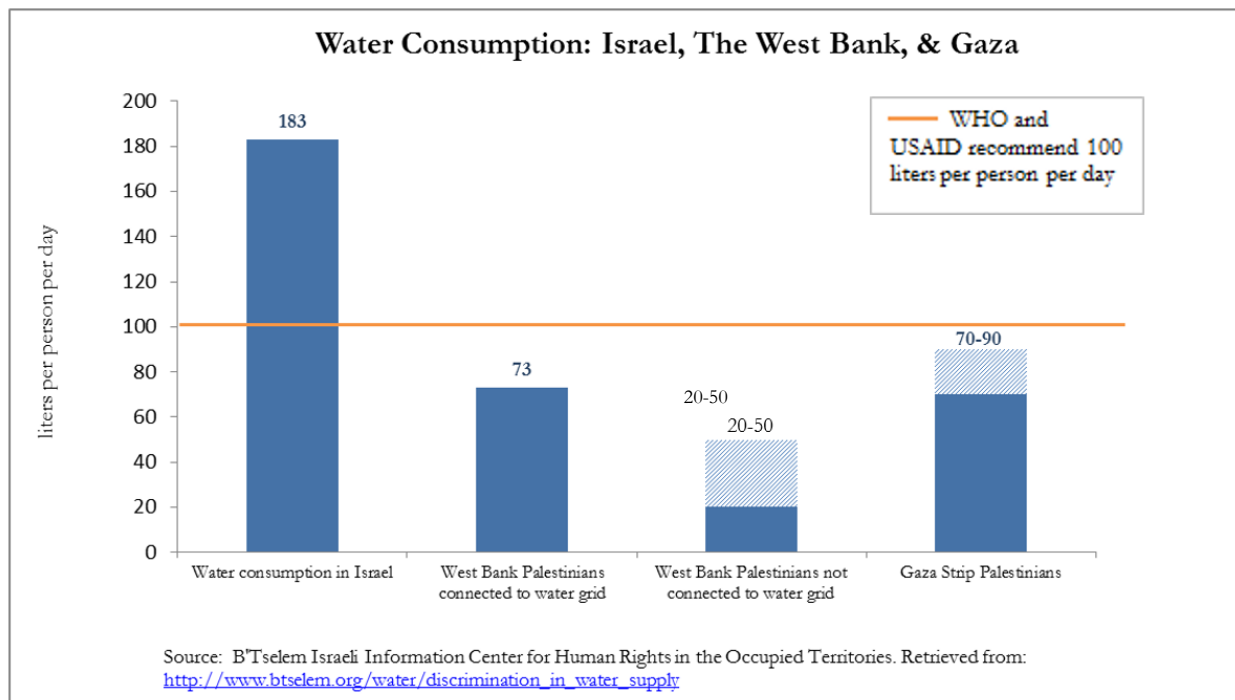


Figure 1. Liters per person per day in Israel, the West Bank, and the Gaza Strip.

In contrast to the West Bank, the Gaza Strip relies on the Coastal Aquifer for its water resources. Since Hamas has become the administrator of the Gaza Strip, the water situation has continued to deteriorate. The Coastal Aquifer in Gaza is dangerously saline, as water from the Mediterranean continues to seep into the overused aquifer.¹¹ To respond to the lack of water, the

Gazans are becoming increasingly reliant on purchasing water from Israel. However, the hostilities between Hamas and Israel make this situation extremely tenuous.¹² A complete discussion on Gaza is beyond the scope of this paper, but it presents a striking example of the complicated interplay between water and politics in the region.

Water availability differs markedly between Israel and the Palestinian West Bank, partially due to enormous differences in wastewater treatment and reuse. While Israel reuses around 75% of its domestic wastewater, far more than any other country in the world, Palestinian reuse is limited to small-scale systems similar to those found in Al'Auja.¹³ Although there are large-scale wastewater treatment facilities in the West Bank, Palestinians are unable to use the treated water for agriculture without a permit from the Joint Water Committee (JWC), which oversees water projects in the West Bank.¹⁴ The JWC is a point of contention between Israelis and Palestinians, as it dates back to the 1995 Oslo Agreement.

2.3 Politics

Signed in 1995, the Interim Agreement on the West Bank and the Gaza Strip, commonly known as the Oslo II Accords, establishes the legal context in which Israeli-Palestinian hydropolitical relations take place.¹⁵ It also establishes a system to administer the West Bank by dividing it into areas. According to Oslo, Area A is under exclusive Palestinian control. In Area B, Palestinians are responsible for civil administration and Israelis are responsible for security administration. Area C, which comprises about 60 percent of the West Bank, is under full Israeli control (see Figure 2).¹⁶ Article 40 of Annex II specified water allocations for Palestinians and Israelis. It also created the JWC, made up of Israelis and Palestinians, to approve water projects in the West Bank.¹⁷ However, the JWC has not formally met for over five years.¹⁸

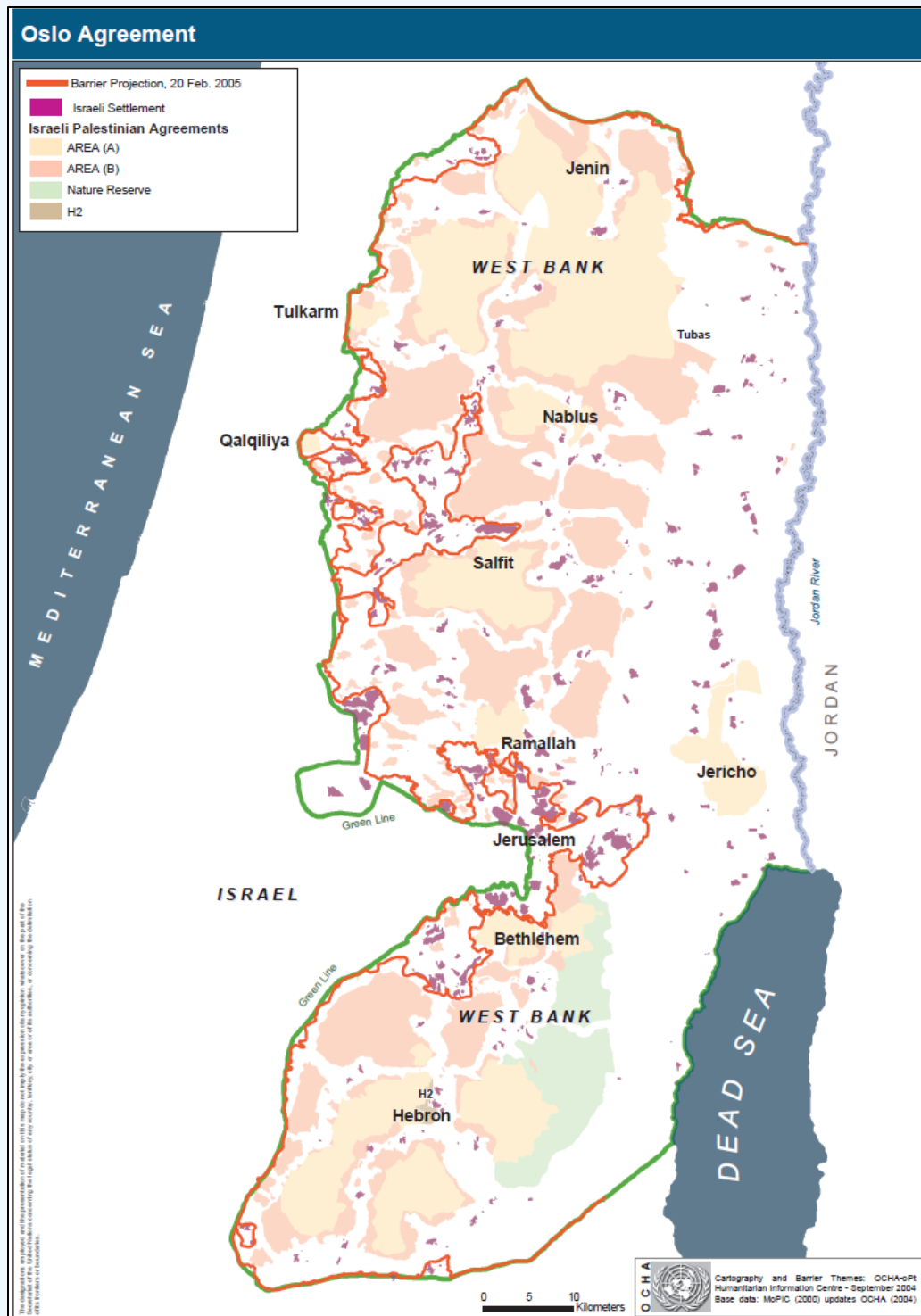


Figure 2. Areas A, B, and C as per the Oslo Agreement.

Israel supplies water to Palestine through Mekorot, Israel's national water company, which sells water to Palestinians at the cost of supply per the terms of Oslo II.¹⁹ According to the IWA,

Israel has exceeded the water quantity it must make available to Palestinians as required under Oslo II.²⁰ However, this is based on the initial allocations as determined in Oslo II and ignores an additional 70-80 MCM/year that Oslo II noted would be required to meet Palestinian demand at an unspecified future point in time after 1995.²¹ Furthermore, Oslo II allocated Palestinians in the West Bank about one quarter of the amount of water that Israel can withdraw from the aquifers for its own citizens, including those living in settlements.²²

Although the IWA insists that it supplies an adequate amount of water to the West Bank, the World Bank notes that there are significant obstacles to the development of the agricultural industry in Palestine due to the fragmentation of water infrastructure created by the systems of Areas A, B, and C, as well as restrictions on the drilling of new wells by Palestinians.²³ While limiting Palestinians' ability to access water resources and develop new water infrastructure, Israel utilizes desalination to increase its freshwater resources.²⁴ Thus Oslo II's allocations do not tell the full story of water available to Palestinians and Israelis today.

Table 1. MCM of water supplied to the West Bank for years 2000 and 2007.

West Bank Water Supply				
Source	2000		2007	
	MCM	%	MCM	%
Municipal wells	16.5	25%	19.8	24%
PWA wells	2.9	4%	9.7	12%
Jerusalem Water Undertaking (JWU) wells	1.9	3%	2.8	3%
Springs	5.4	8%	5.4	6%
Agricultural wells	2.9	4%	2.9	3%
West Bank Water Department	11.5	18%	7.5	9%
Mekorot	21.9	34%	38.1	45%
Settlements	2.0	3%	(2.0)	-2%
Total	65.1	100%	84.2	100%
Source: "West Bank and Gaza Assessment of Restrictions on Palestinian Water Sector Development." The World Bank. (April 2009).				

A lack of centralized water infrastructure in the West Bank means that water supply for Palestinians is fragmented (see Table 1). It is difficult for Palestinians to increase their water supply. The construction of wells or wastewater treatment plants (WWTP), even in Area A, must be approved by the JWC despite the fact that the body no longer meets.^{25, 26, 27, 28, 29} Multiple interviewees indicated that in addition to JWC approval, projects in Areas B and C need approval from the Israeli Civil Administration (ICA), the branch of the Israeli military that administers the West Bank, although reports from the World Bank and the United Nations (UN) Office for the Coordination of Humanitarian Affairs (OCHA) state that only projects that are in or border Area C require ICA approval.^{30, 31, 32, 33, 34, 35} In fact, since the JWC does not meet and thus is not approving projects, it is technically illegal for Palestinians to construct any new water infrastructure, even in Area A. Such projects risk demolition by the Israeli military.^{36, 37}

The inequalities in Oslo II both reflect and entrench asymmetric power relations in which Israel acts as a hegemon. While Israel often exercises hard power through the use of its military, it

also exercises a significant amount of soft power.³⁸ Hard power emphasizes the use of the military and force to coerce other states, while soft power is characterized by one state persuading other states to share its interests.³⁹ Scholars have suggested that the signing of the Oslo Accords is an example of Israel utilizing soft power to exploit an asymmetric power dynamic in order to obtain an agreement far more favorable to them than to the Palestinians.⁴⁰ Israel justifies inequalities in water access by pointing out its compliance under the Oslo Accords.⁴¹ Yet, Oslo II is an interim agreement that was intended to be temporary in nature, despite the fact that Israel continues to treat it as a valid agreement.

Zeitoun and Warner refer to Israel as a hydro-hegemon, a state that is able to assert its power to dictate transboundary water policy.⁴² They note that hydro-hegemons may “institutionalize the status quo” by signing treaties.⁴³ Selby argues that the Oslo Accords had a minimal impact on Israel’s water relations with Palestinians because the agreement is merely a means of disguising its domination over water resources.⁴⁴ A lack of political progress over the past two decades has stymied Palestinian efforts to increase their water access and improve related infrastructure. This stalemate necessitates interventions by NGOs like AIES and PWEG to try to provide for Palestinians’ water needs.

2.4 Al’Auja and Date Farming

Approximately 30.5% of the Palestinian territories are dedicated to agriculture, with the majority of cultivated land being in the West Bank.⁴⁵ Exports total 25% of the Palestinian agricultural sector.⁴⁶ Agriculture also provides food for 3.8 million locals. Located in the Jericho governorate of the West Bank is the small town of Al’Auja, in which 10% of the land is dedicated to agricultural use, particularly for growing bananas, oranges and various vegetables.⁴⁷

Table 2. Palestinian aquifer abstractions.

Palestinian Abstractions (MCM from shared aquifers)			
Aquifer	Article 40 Allocation	1999	2007
Western	22.0	29.4	27.9
North Eastern	42.0	36.9	26.8
Eastern	74.5	71.9	58.8
Total	138.5	138.2	113.5
Source: "West Bank and Gaza Assessment of Restrictions on Palestinian Water Sector Development." The World Bank. (April 2009).			

Al'Auja is located in Area A near the Wadi Al'Auja stream, which is estimated to have an annual flow of 9 MCM of water.⁴⁸ One of the water sources that Al'Auja relies on for its agricultural use is the Eastern Mountain Aquifer, which supplies the Wadi Al'Auja.⁴⁹ However, in recent years, the water quantity

and quality from various springs in the Jordan Valley have decreased (see Table 2).⁵⁰ As a result, the Wadi Al'Auja stays dry for much of the year.⁵¹ This is problematic for a region already dealing with water scarcity due to its desert climate.⁵² AIES and PWEA chose Al'Auja as the site for their project because the organizations believe it is one of the most important agricultural sites in the Jordan Valley. However, Al'Auja has limited capacity to efficiently utilize its water resources.

Recently, there has been a shift towards date cultivation, which provides commercial benefits to the farmers. Palestinian date farming is primarily centered in the Jordan Valley in the regions surrounding Jericho, including in Al'Auja. Dates equate to 14.68% of the total fruit production within the Jericho governorate.⁵³ There are many favorable aspects to harvesting dates. Foremost, the market value of dates is higher than that of oranges and almonds.⁵⁴ Dates are also an attractive option for cultivation due to their nutritional value, cultural significance, durability, and role as a strategic commodity. Date palms can flourish in dry, hot locations with milder winter seasons, making the crop ideal for the arid Al'Auja region. They grow in diverse soil types and have a higher tolerance for salinity, alkalinity and pH level than many other crops.⁵⁵ As water quality in Al'Auja has declined, dates have become one of a diminishing number of crops that can thrive there. Nonetheless, very high salinity in the irrigation water used for date palms will impact the quality of

the fruit as it restricts the trees' ability to absorb other required nutrients.⁵⁶ Additionally, though date palms can flourish in hot, dry regions, a relatively large quantity of water is necessary to sufficiently irrigate date palms. A mature date palm requires 300L to 700L of water daily in order to attain maximum yield.⁵⁷

Farmers interviewed for this report explained that due to the demand for dates as well as the fruit's adaptability to the climate in Al'Auja, many have switched their crops to dates or practice intercropping in order to sustain their livelihoods.⁵⁸ However, despite the appeal of investing in date farming, there are geopolitical challenges to doing so in Jericho and the Jordan Valley. Though date palms can withstand arid climates, Jericho is one of the hottest regions in the West Bank, and it has the least effective irrigation system in all the governorates.⁵⁹ Irrigation water in the area is partially supplied by the eight private artesian wells in Al'Auja. There are also five Israeli wells in a nearby area that use high quantities of freshwater resources for Israeli farmers' irrigational needs. In addition to the 4,500 people in Al'Auja, there are nearby settlements, such as Niran, which pose an issue for the community in terms of wastewater management, allocation of water resources, and land for agricultural use.⁶⁰ Farmers must also consider financial barriers to initial investment in date cultivation. Date palms will produce fruit for an average of 20 years, but a newly planted date palm will not bear fruit for four to seven years.⁶¹ Farmers switching to date farming must have the resources to sustain themselves until they can start earning profits on the dates.

The Israeli-Palestinian conflict also contributes to financial barriers facing farmers. Transportation restrictions, permit requirements, unequal resource distribution, and Israel's land occupation interests in the Jericho region post additional challenges to farmers' prosperity.⁶² In the course of our research, we discovered that within Palestinian communities, there is often a lack of adequate physical and organizational infrastructure to support date farmers. Farmers report that a lack of storage and refrigeration capacity sometimes leads to date spoilage.⁶³ While the owners of

large farms in Al'Auja send their dates to packing houses for eventual sale on the international market, small farm owners who are not owners or partners in the packing house sell their dates on the local market for a lower price.⁶⁴ Despite these obstacles, Palestinian farmers view date farming as a sound investment. With the appropriate techniques and sufficient resources, it should be commercially profitable, given international and local demand and the ability of a single date palm to produce about 150 kg of fruit annually.⁶⁵

However, the Pre-Feasibility Assessment conducted for the BIP Project indicated that date farming in Al'Auja may not be as lucrative as it appears. The Assessment reported a significant gap between how many kilograms of dates the farms should be producing, based on the number and age of their trees, and how many kilograms of dates farmers actually report producing.⁶⁶ The larger the farm, the greater the discrepancy appears to be. It may be the case that farmers are incorrectly reporting the number of trees that they have, or that the trees are not producing the anticipated amount of fruit for some reason. The Assessment noted that in light of this “enormous discrepancy...it is clear that financial and farm management is needed.”⁶⁷ Fortunately, AIES and PWEG’s experience in the region makes them well-placed to address these kind of concerns.

2.5 The Al'Auja-Arava Valley Initiative

Since the summer of 2015, AIES and PWEG have expanded their initiative to increase people-to-people interaction between Israeli and Palestinian actors. They have also undertaken a complementary project that addresses Palestinian farmers’ energy needs by means of solar power. The AAVI now consists of a household wastewater treatment system project, a solar energy project, and a people-to-people project that establishes transboundary relationships. The following section briefly explores the projects within the initiative.

2.5.1 The Decentralized Wastewater Option.

Since 2015, PWEГ and AIES have been expanding their household-level, decentralized wastewater treatment systems to include more members of the date farming community. Fewer than 40% of households in the West Bank are connected to a centralized sewage system.⁶⁸ The decentralized wastewater treatment systems function without the need for a centralized sewage system, and they provide increased water for farming by making greywater from showers and sinks within the household available for reuse in irrigation.⁶⁹ Before the decentralized wastewater treatment systems, any Palestinians who were not on the main sewage system relied upon cesspits that stored greywater and blackwater together. Blackwater, unlike greywater, contains sewage and generally cannot be treated for agricultural use.

In addition to increasing effluent for farming, the household wastewater treatment system offers a cheaper and more environmentally sound option than a cesspit.⁷⁰ A household system creates safer storage for blackwater than the cesspit it replaces. Unlike cesspits, the systems separate greywater from blackwater, which means that only the blackwater has to be stored. The plant stores blackwater within an underground, concrete-lined septic tank. The septic tank needs to be pumped and emptied every three years, while a cesspit can only store sewage for a month. Paying for the monthly removal of sewage constitutes a significant household expense.⁷¹ The cesspits also run the risk of overflowing and leaking into groundwater, contaminating it, while the concrete-enforced septic tanks are nearly impervious to hazardous leaks.⁷² At least one member of the Auja date farming community successfully installed their own decentralized WWTP without the help of AIES or PWEГ.⁷³

2.5.2 The Addition of Build Israel Palestine

In the summer of 2015, AIES and PWEG administered a questionnaire to assess the Al'Auja farmers' needs. The questionnaire was divided into 9 short sections: general information, date production information, water use, agricultural waste, post-harvest operations, energy use, costs related to date farming, overall assessment of date production issues, and the role of co-operatives. The assessment revealed that one of the main problems facing the farmers was their dependence on an unreliable and expensive energy grid to pump water to the crops.⁷⁴ To solve the problem, AIES and PWEG reached out to the New York-based organization Build Israel Palestine to fund a PV grid that would be managed by members of the Al'Auja date farming community. The PV grid primarily powers the water pump that serves the date palm crops. The continual supply of power from the PV grid allows for the water pump to be used without the risk of water hammering. Water hammers are bursts of water from pumps that cause damage to the water pumps. Electricity power interruptions can cause water hammers. The PV grid addresses this issue by creating a sustained energy source.⁷⁵ The PV grid is also designed to reduce energy costs for farmers by dramatically reducing the amount of electricity they must purchase from the Israeli Electric Company (IEC). The PV system should feed unused electricity into the main power grid, generating credit with the electric company that can further defray farmers' expenses. In our interviews, however, the farmers reported that the PV system was not yet hooked up to the main power grid, which meant that they were not yet receiving the financial return they were expecting from the sale of surplus power. Currently, the water pump primarily relies on power from the main grid.⁷⁶

2.5.3 The Farmer-to-Farmer Connection

Last year AIES and PWEG also began a project that aimed to increase people-to-people interaction between the Arava Valley and Al'Auja farming communities, while also providing a

learning platform for Al'Auja farmers. One workshop has taken place so far. In late March, the Al'Auja farmers traveled to the Arava Valley for a workshop on "Date Agriculture in Israel and Palestine."⁷⁷ The workshop took place over three days and included classroom-style lectures with a question and answer period, a tour of an Arava Valley date palm orchard led by one of the Israeli agriculturalists, and a visit to the Arava agricultural research and development center. Due to border restrictions and a background check, one of the Al'Auja farmers was not able to participate.

2.6 Theory of Change

The AAVI aims to support cooperation between Israelis and Palestinians. More specifically, this initiative seeks to foster cooperation and coexistence between Israelis from the Arava Valley and Palestinians from the Jordan Valley by bringing them together to resolve common problems. These issues include promotion of renewable energy, improving water access and availability through wastewater recycling and groundwater pumping, and agricultural development, specifically to enhance and develop the date farming sector.⁷⁸ The mission of AIES is to advance cross-border environmental cooperation in the face of political conflict, to accomplish three goals. First, AIES wants to protect the shared environmental resources of the region from further degradation and loss. Second, it wants to ensure that scarce environmental resources will no longer be a source of conflict. Finally, it wants environmental cooperation to become a model for cross-border cooperation in all other areas of the conflict.⁷⁹ Correspondingly, PWEG's mission is to contribute to the eradication of environmental pollution and the protection of water resources in Palestine by providing innovative and efficient solutions on a local and governmental level.⁸⁰ AIES and PWEG contribute their respective technical expertise, well-established cross-border relationships, and overarching commitment to the environment. In addition, the farmers engaged in the AAVI contribute their farming expertise and willingness to engage in this public display of coexistence.

The Build Israel Palestine organization has simultaneously mobilized Muslims, Jews, and Christians in the United States who are committed to helping people on the ground in Israel and Palestine through cross-border water projects by partnering with locals in Israel and Palestine.⁸¹ The official BIP contract explicitly states that all parties will promote the coexistence behind this project in an effort to attract additional capital for more growth, improve relationships, and make a more peaceful Middle East.⁸² This suggests that building relationships with the other side may lead to a decrease in conflict. In effect, the AAVI rests upon a framework of people-to-people engagement around shared challenges. The AAVI's theory of change was most clearly articulated by one interviewee who said that the act of bringing people together will serve to break down barriers.⁸³ This interviewee further noted the use of nature "to slowly melt down these huge boundaries between us [Israelis and Palestinians]." ⁸⁴ This initiative aims to bridge the gap between neighbors through environmental cooperation. As such, this creation of intentional spaces for people-to-people interaction seeks to humanize and minimize distance from "the other." Human security discourse notes that "family ties, nationalism, ideological "isms," myths about ethnicity, and religions shape collective identities that set "us" apart from "them," creating gaps between our close ones and the remote ones, "the others" – even if they live next door."⁸⁵ The anticipated cause-and-effect relationships and outcomes of this project are well-situated in healthy relationships and connection theory, which notes that peace emerges out of a process of breaking down isolation, polarization, division, prejudice, and stereotypes between or among groups.⁸⁶

The AAVI remains heavily dependent upon functional cross-boundary relationships to impart change. Johan Galtung, known as the principal founder of peace and conflict studies, theorized that "3Rs" must be addressed after episodes of violence: 1) reconstruction of physical, social and cultural infrastructure and rehabilitation of persons; 2) reconciliation of relationships; and 3) resolution of the conflict that erupted in violence.⁸⁷ It is the reconciliation of relationships that

holds the power to facilitate other peacebuilding efforts.⁸⁸ Through these relationships, Galtung posits “the possibility of joint reconstruction work, joint mourning of losses and joint conflict resolution as strengthening reconciliation.” Galtung’s “3Rs” theorizes that accomplishing things together, e.g. installing PV panels or improving date growing techniques, serves to establish and grow trust. Some trust among principal groups is well-established within the AAVI, although some trust is still in its infancy, and in some cases it is non-existent.

The health and functionality of exchanges among AAVI stakeholders are contingent upon building a solid foundation of trust. While literature theorizes that “exposure to each other’s humanity revises dehumanization and joint accomplishment increases trust,”⁸⁹ trustworthy behavior (for example, sharing information and keeping one’s word by exhibiting follow-through) must be displayed over time in order for respect and value for one another to grow. Only then will positive change begin to take hold.

Chapter 3 | Conceptual Framework



Chapter 3 | Conceptual Framework

3.1 Introduction

This section introduces the conceptual framework that shaped our team’s methodology and analysis. We drew on literature pertaining to the way conflict impacts the food-water-energy nexus, civil society action, livelihoods, identity, and gender in order to develop a theoretical foundation for our research. We found that a conflict environment is likely to affect all aspects of development and peacebuilding projects, which has important implications for the work of AIES and PWEG, operating as they do in the context of the Palestinian-Israeli conflict.

3.2 Food-Water-Energy Nexus

Our team’s research question emphasized that the AAVI directly impacts the food-water-energy nexus. The nexus implies that there are linkages among water resources, energy systems and food production. Taking the nexus into consideration enables projects to more efficiently manage resources and positively impact livelihoods. Projects that do not take the nexus into consideration can inadvertently destroy profit margins for produce, degrade the environment, and reduce water and food security.⁹⁰

Date farming in Al’Auja fits into the food-water-energy nexus as follows: date production relies on water for growing date palm crops and washing the picked dates. The central well that supplies the majority of water for agriculture in Al’Auja formerly relied on energy from the power grid that came from the IEC, which supplies 80% of the energy to the West Bank.⁹¹ Energy from the IEC has been reported to be both expensive and unreliable.⁹² The solar energy project has allowed for water pumping via a renewable source that is managed by the Palestinian farmers. This

means that the farmers are using their own energy to pump water from below their land to grow crops on their soil.⁹³

There are potential problems with the current projects affecting the food-water-energy nexus in Al'Auja. The improved energy source also means that more water can be pumped from the ever-depleting aquifer beneath Al'Auja. While the original household wastewater project in the AAVI solely addressed water sustainability in the region, the new solar energy project focuses only on creating a sustainable energy supply. What remains lacking in the initiative is a project that could address the sustainability of both energy and water resources.

3.3 Livelihoods in a Conflict Setting

AAVI focuses on improving farmers' livelihoods in the face of economic, political and environmental challenges. The Sustainable Livelihoods Framework (SLF) helped us evaluate what a sustainable livelihood consists of in Palestine, how livelihoods are impacted by the protracted conflict between Palestine and Israel, and what such impacts might mean for the success of current and future cooperation among the project stakeholders.⁹⁴ For this research, we used the sustainable livelihood definition developed by Carney in 1998:

A livelihood comprises the capabilities, assets (including both material and social resources) and activities required for a means of living. A livelihood is sustainable when it can cope with and recover from stresses and shocks and maintain or enhance its capabilities and assets both now and in the future, while not undermining the natural resource base.⁹⁵

What constitutes a livelihood are the mechanisms that people employ to earn an income, their intangible and tangible assets, and their capabilities.⁹⁶ Furthermore, because all livelihoods depend on natural resources, access to them is deemed necessary for livelihood sustainability.⁹⁷ As Deligiannis notes, a depletion in the quantity, quality, or availability of the natural resource base upon which one's livelihood depends has a significant impact and can eventually lead to a complete

loss of livelihood.⁹⁸ The concept of *sustainable* livelihoods includes equity in both access and assets, as well as sustainability.⁹⁹ In the SLF, the key interacting components of livelihoods are processes, policies, assets, strategies, outcomes, and institutions. While this framework works well to explain livelihoods under “normal” conditions, when examining the livelihoods of people living under conflict, the SLF does not account for significant elements that such environments produce.¹⁰⁰ What constitutes a sustainable livelihood *in a conflict environment* is significantly less explored in the literature.

The ongoing conflict between Israel and Palestine adds a layer of complexity to the concept of sustainable livelihoods in the region. Violent conflicts greatly impact the livelihoods of the people living in the area and pose risks of displacement and destitution.¹⁰¹ For some people, conflict completely destroys their livelihoods, either indirectly by impeding adaptation and coping mechanisms, or directly through the loss of life or property.¹⁰² As Baumann (2000) notes, a main shortcoming of the SLF when examining conflict areas is that the framework does not fully account for the effect that politics and power have on livelihoods - it does not include political capital as an asset.¹⁰³

In a study conducted by Kulatunga and Lakshman (2013), political assets (who one knows or has connections to), which are used to gain access to different markets, played a significant role in the livelihoods of the participants.¹⁰⁴ The livelihood impacts due to the protracted conflict in their study included a rise in input costs (across sectors), market disruptions, and a drop in demand for the various products that each stakeholder’s sector provided.¹⁰⁵ Freedom of movement can also be disrupted by conflict, further hindering one’s access to markets.¹⁰⁶ In Kulatunga and Lakshman’s study, the livelihoods of those who had political assets were significantly less impacted by the conflict.¹⁰⁷ The farmers in Al’Auja that we worked with have few to no national political assets that connect them to the Israeli markets, while the Israeli agriculturalists possess the majority of such assets within the Jordan Valley.^{108, 109} A similar asymmetry in the control over political assets led to a

disparity that increased daily in size in Kulatunga and Lakshman's study.¹¹⁰ Increasing inequality and marginalization can lead to deprivation and a rapid loss in livelihoods.¹¹¹

Different coping and adaptation mechanisms help groups and individuals deal with various stresses and threats to their livelihoods.^{112, 113, 114} Farmers in particular, such as those in Al'Auja who joined the AAVI, might diversify their crops or adopt new practices to increase their yields. We will discuss their use of this coping mechanism later on in chapter four. The poorest farming households and those with the least access to key resources are the most likely to use adaptation and coping strategies.¹¹⁵ Another coping mechanism is to consume less of a key resource or change to a lower quality of that resource.¹¹⁶ An example of this is both Israeli and Palestinian farmers substituting greywater for freshwater in agricultural irrigation when facing water security issues.

Although conflict threatens livelihood sustainability, the professional sector can still play an important role in peacebuilding within the affected communities. Drawing from the literature on post-conflict reconstruction and reintegration, one can see that in times of conflict and post-conflict recovery, people from opposing sides can foster peaceful relationships on small scales in the professional sectors by working together on the shared purpose of developing or improving livelihoods in their communities.^{117, 118} In some cases, livelihoods directly depend on interaction with people from the other side of the conflict.¹¹⁹ In other instances, conflict leads to distrust, which hampers people's capabilities and motivations to cooperate with each other.¹²⁰ On one side of the spectrum, the professional sectors in such cases can become platforms for trust-building and the peaceful sharing of resources and information when livelihood benefits are a common goal.¹²¹ On the opposite side of the spectrum, cases of deep distrust and lack of cooperation among private sector actors can lead to further conflict as people resort to desperate and even violent measures to preserve their livelihoods.¹²² Therefore, it is important for professionals in both the public and

private sectors to be leaders in their communities and foster opportunities for peaceful cooperation with “the other.”

The politicization of livelihoods, especially resource-based livelihoods, can also hinder peacebuilding and cooperation in times of conflict.¹²³ This politicization can in turn lead to alternative systems of control over natural resources, increasing the conflict. Continuous violent conflict breeds insecurity and feeds fear, which affects the behavior of all who are involved.¹²⁴ It is important to note once again the leadership role that the professional sector can play in fostering peacebuilding.

Considering the literature that we reviewed on livelihoods in conflict environments and the peacebuilding implications of such, we focused on learning what the Al’Auja date farmers need to improve their livelihoods that the AAVI could provide given the conflict environment in which they operate. We aimed to understand all of the livelihood-related MECA that the stakeholders had regarding the AAVI. Specifically, we focused on learning about the Al’Auja farmers’ access to key resources and markets, what external support is provided to them, and the overall benefits that they receive from the AAVI. We wanted to know what tangible benefits the Al’Auja farmers had already received from the initiative and what benefits they were hoping to gain in the future. We asked stakeholders about current and future obstacles to date farming in Al’Auja, and what they would change to improve the AAVI’s ability to address the issues that the Al’Auja farmers are facing. We addressed the Al’Auja farmers directly with questions about their specific needs and desires for their farms that they expected or hoped to achieve through their cooperation in the initiative. Similarly, we asked the remaining stakeholders what they hoped for and expected from the initiative in terms of improving the benefits, support, and market and resource access for the Al’Auja farmers. Our findings are discussed in section four.

3.4 Civil Society in Conflict Transformation

Through the AAVI, AIES and PWEG are carrying out development and peacebuilding work that the Israeli and Palestinian governments cannot or will not. This section deals with the role that civil society organizations like AIES and PWEG can play in conflict transformation. It situates the NGOs' work within the broader context of state-level conflict. It also provides a foundation for our team's approach to questions about the relationship between the state and the NGOs that are the subjects of this study.

NGOs are those “non-state, non-profit oriented groups who pursue purposes of public interest,” carrying out tasks not undertaken by the state.¹²⁵ NGOs are part of civil society, which comprises organizations and actors that are separate from the state but represent people's shared interests. When official relationships between governments falter, or when the state is unable to deliver on its obligations to its people, civil society organizations may step in to provide missing services. These organizations may also play a role in conflict transformation, establishing connections between opposing sides and contributing to the peacebuilding process.

The role of NGOs in conflict transformation is well-documented in the scholarly literature. Fischer (2008) highlights the impact of NGOs on democratization processes and nonviolent conflict resolution.¹²⁶ Paffenholz (2014) explores the influence that NGOs can have on peace agreements, depending on the extent to which they are included in the negotiation process.¹²⁷ And in a study of the impact of NGOs on the 1990 Israeli-Palestinian peace negotiations, Pradt (2012, 77) observes that, “Each NGO-led mediation attempt analysed in this study improved the mutual perception of the adversaries' participants, contributed to better understanding of the opponent's interests, and produced jointly agreed proposals.”¹²⁸ The literature indicates that occupying the space in between government and individual actors provides NGOs with unique opportunities to positively influence various elements of peace.

There are several reasons why NGOs are well suited to the role of conflict transformation. Van Tongeren (1998b, 23) observes that, “Collectively, NGOs have the ability to...deal directly with grassroots populations” and “effectively network, given their longstanding relationships, built on trust, with civil society in the conflict zones.”¹²⁹ Because they have autonomy from national governments, NGOs are able to form relationships that governments cannot and connect people across conflict divides in unofficial but genuine ways. These strengths are visible in the PWEG-AIES partnership. The partnership takes place in an environment of non-cooperation at the state level, which makes projects undertaken through official channels difficult. AIES and PWEG deal directly with farmers in Israel and the Palestinian West Bank and focus on decentralized solutions to problems in the food-water-energy nexus.

The partnership between AIES and PWEG has two main functions. First, it brings the two NGOs together in a technical capacity to deliver vital resources to Palestinians in the West Bank. The NGOs, particularly PWEG, act as a substitute for the state in this way, supplying resources and expertise where the government lacks the capacity to do so. This is possible in part because as NGOs, AIES and PWEG are not as constrained by the political situation as the state is. They are able to establish their own networks, separate from the state, to implement solutions on the ground.

Second, the partnership attempts to establish interpersonal relationships between Israelis and Palestinians. As previously stated in chapter 3.2, relationship development between opposing sides contributes to peacebuilding, encouraging a peace between peoples even in the absence of a peace between governments.¹³⁰ Once again, the ability of AIES and PWEG to work directly with people on the ground allows them to create transboundary networks and people-to-people relationships that otherwise would likely not be formed.

However, there are also limitations to NGOs’ role in conflict transformation and peacebuilding. As mentioned earlier, AIES and PWEG operate in a context of power asymmetry

and hydro-hegemony. Due to government regulations, they are limited to small-scale, decentralized projects such as household-level wastewater treatment systems. Moreover, establishing people-to-people connections can be challenging due not only to travel restrictions but also to deep-seated resentment from both sides regarding the ongoing Israeli-Palestinian political situation.

When examining the MECA of different actors involved in the AAVI, the extent to which participants believed AIES and PWEG could and should stand in for the state was vital to understanding their responses. For example, a farmer might be motivated to participate in the NGO-run initiative because he perceives that the state lacks the capacity to solve his water scarcity problem. Underlying beliefs about the power and role of NGOs versus the state could also inform participants' MECA for the AAVI.

Accordingly, our team designed questions aimed to reveal participants' attitudes towards the relative role of the government and NGOs in meeting their needs. Though the questions varied somewhat depending on the interview subject, the team gleaned information about government capacity and restrictions, the relationship among AIES, PWEG and their respective local- and national-level governments, and the upsides and downsides of NGO-led action in the context of the Israeli-Palestinian conflict.

3.5 Identity

Theory surrounding individual and social identity has a strong bearing on the Palestinian-Israeli conflict generally, and the work of AIES and PWEG specifically. The way in which stakeholders in the AAVI view themselves and others influences their willingness to cooperate with the other side and has important implications for the success of people-to-people engagement.

Identity theory explores how self-categorization and comparison to other groups shapes one's social identity, whereas social identity theory refers to an individual's awareness of belonging to a particular societal group.^{131,132} People derive self-esteem from the group they identify with,

which motivates them to maintain a positive view of their group and to view that group as distinct from others.¹³³ This social comparison, in addition to the experiences, feelings, thoughts and actions that occur within the group framework, leads to stereotypes and prejudices about other groups.¹³⁴ In intractable conflicts, some argue that this leads to zero-sum identities.¹³⁵ Each side seeks to maintain the legitimacy of its group identity, which is predicated on the de-legitimization of the other party.¹³⁶

For both Israeli Jews and Palestinian Arabs, individual and collective identities are strongly linked to their respective historical narrative.¹³⁷ The trauma that both sides experienced not only shapes social identities but also leads to demonization of the other side and the breakdown of social trust.¹³⁸ Trauma also heightens fear and one's sense of vulnerability. Both Palestinian and Jewish communities have collective memories in which they are victimized.¹³⁹ Upon coping as a societal group, each side integrates this narrative into their social identities and constructs a perspective of "the other" as a potential threat.¹⁴⁰

Threats to identity trigger intense anxiety, which governs certain behaviors and actions. In intractable intergroup conflicts, issues around land and resources become intertwined with a group's identity.¹⁴¹ Water as a resource is closely related to identity in Israel and Palestine. Acute water scarcity can either serve as an incentive for the two sides to cooperate or create an additional source of contention between them.¹⁴² Cooperation on water issues can benefit both sides through responsible environmental management, but it also creates greater interdependence between the two parties.¹⁴³ In certain cases, "cooperation between rivals will lessen intergroup tensions and lead to more trust when it is a *sustained* cooperation between *equals* to achieve *common* goals in *supportive* context" (emphasis original).¹⁴⁴

While strong in-group identity can lead to hostility towards out-groups, research has found that in certain cases, individuals who assign high importance to their moral identity may be less likely to express such hostility. When a person has a strong moral identity, he or she may extend "feelings

of sympathy and affiliation toward a larger segment of humanity than someone whose moral identity is less important.”¹⁴⁵ This observation has implications for why certain AAVI stakeholders choose to participate in an initiative that benefits “the other.”

Social identity plays a significant role in establishing reconciliation and building trust. Rothstein and Uslaner (2005) discussed the relationship between trust and identity by distinguishing between generalized social trust and particularized social trust.¹⁴⁶ Generalized trust is a normalized connection we have with others and is constructed from our social interactions. It shapes how we view “the other.”¹⁴⁷ Particularized trust describes our relationship to people with whom we identify.¹⁴⁸ Social problems can develop when individual identification with a particular group precludes generalized trust of others. This can lead to “social trap,” a situation in which a group acts a particular way to obtain short-term individual gains that later leads to a loss for the whole group. Many experiments in psychology have demonstrated the influences of social trust on economic and political situations.¹⁴⁹ It is worth considering the applicability of these theories to the trust and cooperation potential among the farmers in this initiative. Strong in-group identification may make Israeli and Palestinian participants hesitant to work with one another. However, trust may develop when the groups are brought together in pursuit of a common interest or goal.

Our team recognizes that identity is central to water cooperation, peacebuilding, and developmental initiatives taking place within the protracted Israeli-Palestinian conflict. Because of the complex political climate, NGOs like AIES and PWEG are interested in establishing cooperation between the two groups using a bottom-up approach. It is important to consider cultural differences when developing projects that require trust-building because asymmetrical power dynamics can result in misunderstandings and further mistrust. Contact should be psychologically meaningful for quality interpersonal relations between Palestinians and Israelis. Interactions that are culturally sensitive can support rebuilding positive identity and diminish feelings of insecurity.¹⁵⁰

Intergroup dialogue can help to humanize members of the other groups who were previously delegitimized.¹⁵¹ Future workshops should include joint problem-solving exercises geared toward common goals that cannot be unilaterally accomplished, thereby diminishing a zero-sum mentality.¹⁵²

While contact theory studies have shown positive outcomes for decreasing social distance and increasing interactions between groups, implementations must be done cautiously. Assistance from a neutral third party, a skillful facilitator, and a carefully constructed program can all contribute to the success of people-to-people interactions across the conflict divide. Failure can deepen negative behaviors, increase hostility, and reinforce stereotypes, further damaging opportunities to rebuild trust.¹⁵³ “Peace” is a highly contentious term that evokes political connotations, yet it is an alluring prospect for international donors and might be an added bonus of the AAVI. Taking the discussion on identity into consideration for future projects can yield positive outcomes for the broader conflict in the region as well.

3.6 Gender

3.6.1 Women in Palestine

As our team prepared to conduct the rapid appraisal assessment, we were aware of the need to ground ourselves in the cultural context of the initiative we would be investigating. Accordingly, we decided to examine the role that women play in Palestine generally and in Al’Auja more specifically. We also conducted research that related women to the key components of the AAVI, including development, peacebuilding, and environmental security.

Women in Palestine experience many of the same obstacles to advancement that women elsewhere in the MENA region do, but they also face barriers that are specifically related to the Israeli-Palestinian conflict. As of 2009, only 15.2% of women participated in the formal labor force in Palestine.¹⁵⁴ A 2011 U.N. Commission on the Status of Women stated that, “The disadvantaged

situation of Palestinian women has been exacerbated by weak rule of law and gender-based discrimination that remains embedded in legislation, regulation and policies.”¹⁵⁵ Family influences and social norms also play a role in women’s underrepresentation in both economic and political life.¹⁵⁶ For example, women may be constrained from taking jobs that require them to commute because such an arrangement “would interfere with women’s household duties and expose them to risks of harassment unless chaperoned.”¹⁵⁷

Despite deeply entrenched cultural norms, the position of women in Palestinian society is changing. Women are moving into political life; they comprise about 25% of cabinet members and major political parties have minimum quotas for female participation in their governing bodies.¹⁵⁸ Women’s labor force participation, while still low, has risen substantially since over the past two decades, from 11.2% in 1995 to 19.4% in 2014.¹⁵⁹ However, this may be less a sign of social change and more a symptom of the overall high rate of unemployment in Palestine. In such an environment, high unemployment among men may force women to seek work out of necessity. A 2013 World Bank report stated that, “Extensive internal and external barriers to physical mobility form the most significant constraints to growth and private sector job creation.”¹⁶⁰ The political situation is constraining the Palestinian economy, and both men and women are suffering as a consequence.

3.6.2 Gender-Specific Strategies in Development Projects

In the unique sociopolitical context of Israel and Palestine, integrating a gender-specific approach to development projects is both a necessity and a challenge. What appears to be women’s “empowerment” may be just the opposite, as a 2011 UN report on women in Palestine captures: “Women’s contributions to sustain the family’s livelihood, such as heavy work on the family’s agricultural holdings ... have not strengthened women’s status in the community, but have

contributed instead to their marginalization.”¹⁶¹ An effective gender strategy has the potential to strengthen communities’ economic and social well-being, while an inappropriate one may do the opposite. Great care should be taken to devise an approach that integrates women into development and peacebuilding projects in a contextually sensitive way.

NGOs stand to benefit from the addition of gender strategies to their project proposals. In 2012, United States Agency for International Development (USAID) published its updated Gender Equality and Female Empowerment Policy, which aimed to integrate gender equality and female empowerment “throughout the Agency’s Program cycle and related processes: strategic planning, project design and implementation, and monitoring and evaluation.”¹⁶² Having a gender strategy may bolster NGOs’ project proposals and make them more likely to receive funding. In this way, a focus on gender inclusion can benefit both the NGOs and the communities they hope to serve.

3.6.3 Women in Environmental Security

Women play a vital role in fostering environmental security. Unfortunately, however, when the environment is insecure, it is women who bear the brunt of its burdens.¹⁶³ Ecofeminists note a cyclical process of exploitation between gender and nature, fueling environmental destruction, food scarcity, and women’s discrimination and violence.¹⁶⁴ This calls for a broader framework conceptualizing human security. The Human, Gender, and Environmental Security (HUGE) framework, expands traditional notions of security to include human and environmental health, livelihoods, food, education, and respect for cultural diversity.¹⁶⁵ Acknowledging that the oppression of women and exploitation of nature are deeply interconnected, ecofeminist theory values equality and equity, including care, solidarity, and respect for other humans and for nature.¹⁶⁶

Further, ecofeminist theory is an embodied component of the HUGE approach to holistically viewing security. Under this framework, domination and appropriation of Mother Earth

cannot be extricated from the domination and appropriation of women, children, minority groups, the elderly, and the disabled; instead, the security of one symbiotically encompasses the security of the other. In addition, this framework captures the ramifications of increased privatization on biodiversity, cultural diversity, economic livelihoods, and terrorism. Ecofeminist theory relates these global challenges to the exploitation and discrimination of gender, noting that it is inherent in the existing patriarchal system.¹⁶⁷ HUGE presents a direct challenge to the existing structures in that “the exclusion of women and other minorities from science, technology, history, and public life have implied and continue to cause enormous costs for the political process, the economy and the environment, for peacebuilding, and culture of the world.”¹⁶⁸ The recognition that women play a crucial role in efforts to foster environmental security is key to shaping the building of Palestine.

3.6.4 Women in Conflict Transformation and Peacebuilding

Sustainable conflict transformation is impossible without the full political and economic participation of women. Women have multidimensional identities—as wives, mothers, sisters, aunts, friends, community members, and often caregivers. Embodying such roles endows women with contextual perspectives and nuanced views of societal interconnectivity, particularly with respect to conflict. It is in “seeing with eyes that are gender aware, [that] women tend to make connections between the oppression that is the ostensible cause of conflict (ethnic or national oppression) in the light of another crosscutting one: that of gender regime.”¹⁶⁹ Despite the strength of women’s perspectives, women remain restricted by social hierarchy constructs, which continue to reinforce deeply ingrained gender power relations.

According to feminist theory, acts of war deploy as a continuum of violence from the bedroom to the battlefield.¹⁷⁰ This renders women insecure both in and out of the home. In addition to the threat of gender-based violence, it is women who bear the burden of holding the fabric of

their communities together. This places women under an extreme amount of pressure during times of conflict. Despite the pressures, women are often the first to reach across ethnic and religious divides in order to rebuild communities and families torn apart by violence.¹⁷¹ In essence, the value placed upon community health and well-being prioritizes maintaining human life, thereby diminishing distance to “the other.” Women’s ability to fluidly navigate between roles imbues them with unique understanding of societal interconnectivity. Furthermore, many women fulfill roles which involve caring for others; this reinforces empathy for the human condition and places women in a powerful position to transform conflict environments.

Sound peacebuilding structures mandate both female and male voices. Gender mainstreaming is a strategy for making women’s concerns and experiences, as well as men’s, an integral dimension of the design, implementation, monitoring, and evaluation of policies and programs in all political, economic, and societal spheres, so that women and men benefit equally and inequality is not perpetuated.¹⁷² Since there will never be peace without equality, inclusion of women is of invaluable importance.

3.7 Scaling Up

Since we knew we would be making recommendations for the future of the AAVI, our team explored literature relating to project growth, specifically scaling up. For NGOs, finding the best timing and approach to scale up is not always easy. In this report, “scaling-up” refers to any action that increases the scope of the AAVI either by adding new elements, creating new projects, or expanding into new geographical areas. Before scaling up, a NGO should conduct an assessment to determine whether their program is producing tangible results.¹⁷³ If so, it must then figure out *how* to scale up the impact of the program.¹⁷⁴ It can also be difficult to decide to what level a program should be scaled up. The decision is to either “go deep or go wide.”¹⁷⁵ In other words, expanding within the region or current field is “going deep.” Whereas expanding to add either new fields of

focus or taking the existing program into new locations is considered “going wide.”¹⁷⁶ The choice depends the particular context of each potential expansion area, and whether or not there are gaps in that area that could be filled by project expansion.^{177, 178}

Before expanding into new areas can be considered, one must know what is working within the program.¹⁷⁹ The core parts that can be scaled up effectively and efficiently must be identified.¹⁸⁰ In essence, the NGO must identify what is the minimum viable product of the program – what Wong et al. (2014) call the “efficiency core” – that has proven itself to be a viable solution to the issue at hand, and is therefore the part of the program that scaling initiatives should focus on.¹⁸¹ In other words, scaling is typically not effective if a program is simply replicated in another area without taking into account the new location’s specific context and adjusting for it.¹⁸² At the same time, custom designing an entirely new program for that area is not economical or time efficient.¹⁸³ Instead, only the parts that are core to the program and have proven themselves effective should be replicated.¹⁸⁴

Scaling up impact is also more likely to succeed if the NGO can find a way to promote community ownership of projects rather than keeping communities dependent on the NGO presence.¹⁸⁵ This typically requires providing training and technical assistance to partner organizations or the project participants so that they can maintain program impact.¹⁸⁶ As Tripp (2013) says, this is when a NGO is “cultivating the ecosystem” – which also includes conducting activities such as advocacy, marketing, monitoring and evaluation, and business and product development.¹⁸⁷

3.8 Normalization

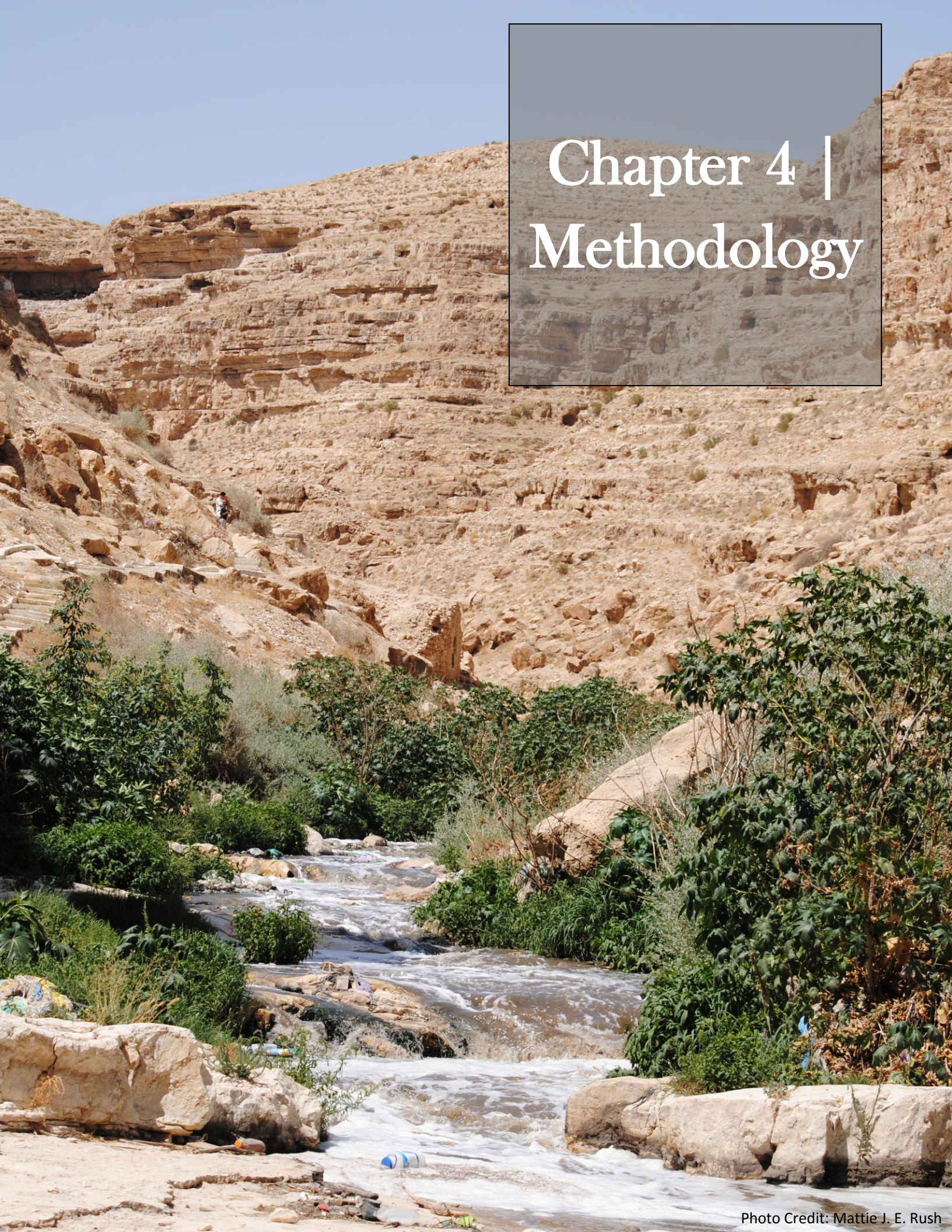
Palestinian and Israeli cooperation on the AAVI takes place in a context of power asymmetry and Israeli hydro-hegemony, as discussed in section two. Given this context, our team felt the need to investigate whether cooperation within the AAVI worked toward equity, or instead

moved in the direction of normalizing relations. The concept of normalization in the Israeli and Palestinian context means that the two sides have normal relations without addressing the issue of Palestinian sovereignty.¹⁸⁸ In other words, Israel's occupation of Palestine is considered a normal condition between the two entities, or what one scholar describes as creating "Palestinian domestication."¹⁸⁹

To avoid normalization, groups like the Arab Nationalists use the concept of anti-normalization, which states that any interaction with Israel is a form of normalization.¹⁹⁰ However, anti-normalization rhetoric is often criticized for being a roadblock to the peace process.¹⁹¹ For this reason, our research paper adopted the concept of normalization developed by Palestinian Nationalists. Palestinian Nationalists believe that cooperation with Israel can take place as long as the cooperation is in some way directed towards the establishment of Palestine as a state.¹⁹²

Our research team used this concept to analyze the initiative to ensure that the cooperation between the partners worked towards Palestinian sovereignty. This meant that people-to-people interaction must be directed towards empowering Palestinians, and that there could be no direct or indirect involvement of the initiative with Israeli settlers in the West Bank. On a broader level, the initiative had to be examined to make sure that it was not creating Palestinian dependency on Israel, or what some scholars refer to as an "asymmetric contingency,"¹⁹³ but instead an interdependence that brings benefits to all partners.

Chapter 4 | Methodology



Chapter 4 | Methodology

This chapter discusses the process by which our team conducted its research, processed data, and illustrated our findings based on the four core concepts of the research question: MECA. The sections in this chapter will define what these concepts mean in the context of our research and how they shaped our interview questions. Our team's conceptual framework played an important role in determining the direction of questions about stakeholders' MECA.

Our research team approached the rapid appraisal process with the notion that what drives the actors to participate (their motivations) would be distinct from what they wish for in the future (their aspirations). However, in the course of our research, it became clear that there was overlap between certain categories. For example, what is considered a motivation for some (such as lower energy costs) was actually relayed as an aspiration for others. This points to the intersectionality of the MECA and indicates that the categories should not be viewed in isolation. This report separates the four categories to maintain consistency with our research question.

4.1 Data Collection

The research framework was implemented in two phases. The first phase was a desk study on the food-water-energy nexus and hydro-hegemony in the Israeli-Palestinian context conducted over a one-month period in Washington, D.C. This period also consisted of training on the rapid-appraisal approach to field research with an emphasis on conducting effective interviews. The first interview was conducted during this period with BIP. The second phase consisted of field research using the rapid appraisal technique and was conducted over 12 days in various cities and villages in Israel and the West Bank. Data was collected through interviews, observations, and site visits to three WWTPs, two springs in the West Bank, household-level wastewater systems and PV systems.

The research was primarily guided by a mix of 20 semi-structured interviews and group discussions involving 40 individuals, including Al’Auja farmers, Israeli Agriculturalists in the Arava Valley, and AIES and PWEG staff. We also conducted interviews with non-project actors such as Palestinian and Israeli government officials, representatives of civil society organizations, and environmental experts. All data was consolidated into a matrix that organized stakeholders’ MECA according to the conceptual framework (see Figure 3).

	MOTIVATIONS	EXPECTATIONS	CONCERNS	ASPIRATIONS
CIVIL SOCIETY				
LIVELIHOODS				
IDENTITY				
GENDER				

Figure 3. Data collection matrix.

4.2 Participatory Rural Appraisal and Research Limitations

Our team utilized a rapid appraisal assessment when conducting interviews over a 12-day period in Israel and the Palestinian West Bank. Rapid appraisal data collection is employed when the amount of field time is limited.¹⁹⁴ USAID notes that interviews during rapid appraisals are “qualitative, in-depth, and semi-structured.”¹⁹⁵ Two team members led each interview, although the entire team was present to record data. Topic guides, or lists of key questions with possible follow-ups, were utilized in order to best guide the interview.¹⁹⁶ The questions were semi-structured and therefore adaptable for different interviewees, and the question order was changed if necessary during an interview in order to maintain the flow. The interviews revealed a number of themes that were repeated over the course of our fieldwork, which improved the validity of our findings.

However, our research methodology faced many limitations, diminishing the robustness of our findings.

Specifically, our findings are restricted by small sample size, the gatekeeper bias, lack of varied and dynamic perspectives, issues of trust, and the limited timeframe in which we conducted our research. Operating within significant time constraints, participatory rural appraisals are unable to conduct interviews with a large number of sources, reducing the number of perspectives utilized to draw conclusions.¹⁹⁷ Gatekeeper bias, in which stakeholders determine the individuals that researchers talk to, prevented us from obtaining additional dynamic and varied perspectives. Furthermore, the gatekeeper bias filtered the information we received and impacted participants' responses. While we conducted interviews in English whenever possible, it was necessary to use a gatekeeper to aid in Arabic translation. Due to the lack of a third-party translator as well as the general difficulties communicating through a third person, some data may have been lost during the translation process.¹⁹⁸ It is certainly possible that we were not fully trusted by participants because we were not from the region, which could have limited the amount of information the participants were willing to reveal. Lastly, the short timeframe for preparation before conducting research serves as a limitation to our understanding of the issues. While we are confident in our findings in relation to the particular initiative being studied, our data has limited applicability to general cooperation between Israelis and Palestinians.

This report maintains participant confidentiality in that each interviewee has been assigned a randomized number. After collecting data, we entered the names of our interviewees into a Microsoft Excel spreadsheet. A second column of random numbers was then created using Excel's random number function. The results were sorted on these numbers, creating a random order of participants. This order determined the numbers assigned to interviewees for use in citations for this report.

4.3 The Research Question

Building upon the work of previous American University practicum teams, our team also examined the environmental and peacebuilding significance of the AIES-PWEG partnership in the context of the Palestinian-Israeli conflict. Guided by theories on identity, livelihoods within a conflict environment, and the role of civil society in conflict transformation, our primary research question asked: *What are the development and peacebuilding-related motivations, expectations, concerns, and aspirations of Israelis and Palestinians who choose to cooperate on a food-water-energy nexus project?*

Our primary research question seeks to identify the long-term implications of cooperation between Israelis and Palestinians in light of the power imbalance between the groups. It also identifies development and peacebuilding motivations, as well as the disparities between them, in the context of resource sustainability. This is important for our partners, AIES and PWEG, who each have distinct interests that must be understood in order to optimize the AAVI. By answering the central research question, our team seeks to inform AIES and PWEG's decision-making and provide concrete recommendations regarding the AAVI's future.

4.4 MECA

Our research team sought to capture the MECA of all interviewed stakeholders. The data informed our analysis primarily by illuminating where there are synergies and gaps between AAVI stakeholders. The findings in this report are categorized by the four key concepts of the research question pertaining to the various stakeholders in the AAVI. Understanding where stakeholders converge and diverge on their respective MECA serves to guide the future trajectory of this transboundary cooperation. The elements of our conceptual framework were integrated throughout questions about stakeholders' MECA.

4.4.1 Motivations

Motivations describe different stakeholders' initial reasons for getting involved in the AAVI. In order to understand motivations, our team asked fairly direct questions such as: *what motivated you to get involved in this initiative?* This question typically opened the interviews, which gave us information on the stakeholders' background and why they chose to participate in an initiative that involved working with "the other." The motivation question(s) shed light on the individual concerns and beliefs that motivated stakeholders' actions in the AAVI. Because there are expectations of what may result from the initiative, the stakeholders believe they can help to favorably alter decisions and outcomes. Seeing where stakeholders' motivations align and diverge is useful because it allows for greater insight into the stakeholders' likely reaction to future cooperation.

4.4.2 Expectations

Expectations were defined as what stakeholders in the initiative anticipate from their involvement in the AAVI. The success of cooperative efforts, particularly in intractable conflict environments, rests heavily upon stakeholders consistently remaining engaged and not becoming apathetic if expectations (such as the receipt of benefits) are not met. Any misalignment of expectations can threaten levels of participant engagement as well as the long-term sustainability of the AAVI. Expectations cannot be properly managed unless they are first clearly understood. In order to capture the stakeholders' expectations, our research team asked questions such as:

- 1) *What do you expect from your interaction with [Israelis/Palestinians]?*
- 2) *What tangible community benefits do you expect to see as a result of your participation in this initiative?*
- 3) *What role do you expect to see women playing in this initiative?*

These expectation-themed questions were generally posed after the initiative stakeholders shared what motivated them to participate in the AAVI. This assisted in analyzing the roles of the various stakeholders in the context of the initiative and what they expect from other actors. These questions

allowed us to assess what kind of benefits stakeholders thought they might realistically derive from participation in the AAVI.

4.4.3 Concerns

Our team also aimed to identify the various concerns of each stakeholder. We defined a concern as a perceived deficiency in the initiative or a challenge to its success. We sought to identify concerns relating to the theoretical frameworks around this specific initiative, particularly the impact of conflict on civil society, identity, and livelihoods. The concern-related questions followed a similar structure to those pertaining to motivations and expectations. Examples of questions asked include:

- 1) *Beyond farming challenges, do you anticipate other challenges in the partnership moving forward?*
- 2) *What changes would you want to make to this initiative?*
- 3) *Have you encountered resistance to this cooperation [from other specific actors]?*
- 4) *What are some of the barriers that you experienced to getting what you want out of this initiative?*

Hearing different stakeholders' concerns allowed our team to evaluate the effectiveness of the AAVI in meeting stakeholders' expectations. It also gave us important awareness of opportunities for improvement within the AAVI as well as issues that may affect future AAVI development.

4.4.4 Aspirations

When conducting an initiative involving multiple stakeholders, it is necessary to know what each participant hopes to gain from cooperation. We found interviewees' aspirations sometimes overlapped with their motivations because it is what they hoped the AAVI would achieve that motivated them to participate. However, we attempted to distinguish aspirations from motivations by framing aspiration questions positively and with a long-term trajectory for future participation and initiative direction.

To ascertain stakeholders' aspirations, we asked questions pertaining to their hopes and desires for long-term AAVI outcomes, future cooperation, and peace and development in their region. Some of the questions posed to the interviewees included:

- 1) *What do you hope to gain from participating in this initiative?*
- 2) *How do you hope this initiative will contribute to peacebuilding?*
- 3) *What aspirations do you have for women's involvement in the initiative?*
- 4) *What are some changes you would like to see in the future regarding this initiative?*

These questions were typically asked toward the end of our interviews as a way to conclude them. We then categorized the aspirations of each stakeholder to clearly identify the areas in which different participants shared similar goals. Conversely, these categories also allowed us to pinpoint the areas in which agreement between stakeholders might be difficult for the initiative to attain. Our aim is to determine where stakeholders' aspirations overlap and diverge, which can assist project managers in future decision-making. Aspirations stems from the outcomes of their expectations and concerns, which shapes what stakeholders hope to see in the future.



Chapter 5 | Findings

5.1 Introduction

This chapter presents our findings on the stakeholders' MECA regarding the initiative. Each of these topics is discussed in its own respective section. Each section is further divided by actor group: Al'Auja farmers, Israeli agriculturalists in the Arava Valley, AIES, PWEG, and the governments where relevant. This chapter concludes with a cross-sectional analysis of the stakeholders' MECA, pulling out areas of synergy, divergence, and unexpected findings within the AAVI.

The points of synergy illuminate areas that present opportunities for further growth, while the existence of competing interests has implications for the long-term viability of this cooperative effort. For the AAVI to be successful, AIES and PWEG should capitalize on stakeholders' common ground and appropriately manage the areas where these points differ. Otherwise, such fragmentation could be counter-productive or detrimental to the initiative. The overall purpose of this analysis is to provide visibility on what viewpoints may need managing, as well as which areas present tremendous opportunity. As noted in the Methodology section, differentiating the MECA categories from one another has proven challenging since there is significant overlap between them. Overlap is not a cause for concern; rather, it sheds further light on stakeholders' differing perspectives.

5.2 Motivations

5.2.1 Al'Auja Farmers

Al'Auja farmers are primarily motivated to participate in the AAVI by the desire to improve their livelihoods. The 2015 Pre-Feasibility Assessment conducted by BIP found that the most important problem the Al'Auja farmers perceived was high energy costs, including costs for water

pumping and date refrigeration.¹⁹⁹ The prospect of reducing energy-related financial burdens motivated farmers to participate in the BIP project.

The desire to build their capacity motivates Al'Auja farmers to cooperate with Israelis. As a result of their nascent experience in the medjool date market, the farmers are motivated to work with their Israeli counterparts, who have greater experience in marketing and advanced farming techniques. This led them to participate in a one-day visit to the Arava Valley to meet with Israeli agriculturalists. One farmer noted that “the relationship with the Israelis is growing; we are not doing politics with them, only looking for more benefits and tangible results: human, technical, social behavior.”²⁰⁰ The Al'Auja farmers desire to improve their livelihoods regardless of the political climate. Moreover, the farmers do not cite political motives as a reason for their participation. One farmer noted that “Palestinians reject normalization, and we need to focus on the efforts of the cooperation.”²⁰¹ Another stated, “We have to separate between political and business things.”²⁰² Despite the politicized economic environment, the farmers still participate in the initiative with the motivation of getting tangible benefits in return, which will allow them to improve their livelihoods and remain on their land. Their motivation stems from their aspiration to stay on their land, exemplifying the often murky delineation between motivations and aspiration, which will be explored in greater depth in section 5.4.1.

5.2.2 Israeli Agriculturalists in the Arava Valley

A central theme among some Israeli agriculturalists in the Arava Valley who cooperate with Palestinians is a desire to help others. One agriculturalist was motivated to help Palestinians improve their quality of life but did not want recognition for it.²⁰³ Another was interested in helping the less fortunate without regard to their identity as Palestinians.²⁰⁴ One agriculturalist was motivated by the idea that, “when you give, you receive.”²⁰⁵ This indicates that the interviewee derives personal

fulfillment from helping others. As noted in chapter 3, individuals place a high value on their moral identity may be more likely to help “the other” in intergroup conflicts in order to improve their self-worth.²⁰⁶ The motivations of multiple Israeli agriculturalists are consistent with this. Finally, one agriculturalist was motivated to develop good relations with Palestinians to ensure that working relationships exist in the event a political solution is reached.²⁰⁷

The data we collected from the Israeli agriculturalists is significant when framed in the context of social theory. The expressed willingness to help and establish good relations with “the other” indicates that while group distinctions have been made, the psychological benefits of intergroup interaction appear to be a motivating factor for some Israelis, which is important in order to build trust and repair relationships between Israelis and Palestinians.²⁰⁸

5.2.3 *AIES*

AIES is motivated by the desire to improve people’s lives and promote responsible shared environmental management. AIES stakeholders strongly wish to demonstrate an alternative narrative for how Israelis think about and interact with Palestinians.^{209,210} These motivations stem from moral values around equitable development and a wish to ameliorate the negative impact of Israeli policies on the Palestinians. Several Israeli stakeholders stated that they would not be able to live in Israel without involving themselves directly in the plight of the Palestinian people.^{211, 212}

In working to advance transboundary environmental cooperation in the face of political conflict, the AIES stakeholders subscribe to a theory of change that supports capacity building from the ground up.²¹³ They aim to empower AAVI participants by providing them with tangible benefits. One AIES stakeholder believes that without those benefits, participants will not link development to peacebuilding.²¹⁴ Moreover, if AIES is unable to provide benefits to both Israeli and Palestinian participants, then the organization will not realize its mission of creating peace through

environmental sustainability. According to this view, any initiative that fails to bring direct tangible benefits to participants could potentially widen the gap between peacebuilding and development.

The participants are motivated by AIES' theory of change, which involves people-to-people interaction with "the other." According to interviewees, such interactions help the two sides develop a common language that circumvents the politics of the region and allows them to focus instead on the shared environment.^{215, 216, 217} AIES is motivated to participate in the AAVI to strengthen its partnership with PWEG and maintain positive contact with "the other" through the pursuit of common goals.

5.2.4 PWEG

In contrast to AIES, PWEG is not directly motivated by peacebuilding. PWEG's participation in the AAVI is driven by the desire to promote environmentally sustainable livelihoods for date farmers in Al'Auja. As one interviewee noted, although peacebuilding is not PWEG's mandate, it can be a side-effect of their environmental work.²¹⁸

PWEG's explicit environmental motivation is well aligned with its mission to contribute to the eradication of environmental pollution and the protection of water resources in Palestine by providing innovative and efficient solutions.²¹⁹ The expansion of solar power aims to provide the farmers in Al'Auja with a stable, cost-effective energy source. PWEG sees the tangible benefits of this technology and is motivated to encourage other farmers to install similar systems so that they too can overcome the exorbitant costs of electricity. Not only do PV systems reduce electricity costs by 25-30%, they have proven more reliable than other sources of energy in the region.²²⁰ For the sustainability of both the environment and improvement of the farmers' livelihoods, PWEG is motivated to communicate and educate others on the benefits of buying into these systems. The shift to using solar energy for groundwater access radically intersects the food-water-energy nexus.

PWEG is also motivated to continue growing the Palestinian agricultural sector. It is estimated that “\$704M a year could be added [to the economy of Palestine] if it had more access to farmland and water in parts of the West Bank fully controlled by Israel.”²²¹ Not only does the agricultural sector remain one of the largest parts of the Palestinian economy, Al’Auja itself is classified as a natural resource area, making this a strategic location both economically and politically. It is what one principal aptly calls, “a continuation of the work of our forefathers – building on the work of perfecting the environment.”²²² According to PWEG’s theory of change, it is through this act of perfecting the environment that change in the capacity for water, energy, and food will manifest.

5.2.5 Government

The PWA is motivated to alleviate water stress in Palestinian communities. However, as a government agency it is limited in its ability to access external partners and resources, which is why it collaborates with PWEG, an NGO, on implementing local projects. The PWA, in conjunction with PWEG, works to provide technical support to communities.

The PWA’s overarching motivation is for the Palestinian people to achieve sovereignty over water resources.²²³ One of its primary mechanisms for doing so is to decrease Palestinians’ dependence on water provided by Mekorot. This motivation is driven by the PWA’s desire to develop water services that advance economic development and support food and water security in Palestine.²²⁴ Such efforts are amplified when the PWA engages in technical cooperation with PWEG. In support of a sovereign Palestine, the PWA is motivated to support PWEG’s effort in AAVI. Conversely, the IWA has no motivations for AAVI. Instead, the IWA is motivated to prevent a humanitarian crisis in the West Bank and Gaza.²²⁵ As such, it continues to exceed the Oslo-mandated allocations for Palestine.

5.3 Expectations

5.3.1 Al'Auja Farmers

The date farmers in Al'Auja have specific expectations for the AAVI and future cooperation with PWEG and AIES. These include both development and peacebuilding expectations. Regarding economic and livelihood benefits, the installment of the PV system in Al'Auja was one of the most important aspects of the BIP project.²²⁶ The PV grid is expected to help defray farmers' energy expenses.^{227, 228, 229} In doing so, the PV grid can be seen as increasing farmers' access to the main natural resource upon which their livelihoods depend. Access to natural resources is crucial for livelihoods to be sustainable; therefore, the PV grid is expected to increase the livelihood sustainability of the farmers.²³⁰ In the future, the farmers expect that the PV grid will be expanded to fully power the water pump so that the only costs for the farmers will be those related to system maintenance.

The farmers articulated an expectation that they would receive a return on their investment with respect to the PV grid. For four to five months during the year water is not pumped, but is received from the spring flow.²³¹ Thus, the pump does not use electricity for those months. This allows for the PV grid to accumulate electricity credits for the farmers, thereby providing another source of income.²³² Diversification of income is not uncommon, especially in the face of stress on livelihood or conflict in which adding new sources of income can be an effective adaptation strategy.²³³

Similarly, diversifying or switching crop types is a livelihood coping mechanism in times of conflict when restrictions impede access to the necessary quantity or quality of key resources.²³⁴ The Al'Auja farmers have adopted this coping mechanism in response to a decrease in the quality of water available for irrigation in Al'Auja. As discussed in chapter 1, groundwater quality has deteriorated over time, and this is not expected to change any time soon given the ongoing conflict

and the cumbersome approval process for well-drilling permits.^{235, 236, 237, 238, 239} In light of this, the Al'Auja farmers have made dates a main crop on their farms in place of bananas and vegetables since dates do not require such high quality water.²⁴⁰ The farmers expect their continued participation in the AAVI to help them establish more solutions to their water issues.

Other livelihood benefits that the farmers expect to gain from AAVI concern capacity building. The farmers stated that participating in the AAVI empowers them to cultivate their land.²⁴¹ The farmers expect that future cooperation with Israelis will help them improve their marketing capabilities and obtain information on better packaging and storage techniques.²⁴² They recognize the opportunity to benefit from Israeli agriculturalists' expertise in these areas.

A second broad class of expectations involves engagement with partners. When the Al'Auja farmers visited AIES, they received training and the opportunity to engage with Israeli agriculturalists in the Arava Valley. Although the exchange between Israelis and Palestinians was unique, it does not appear to have built trust among stakeholders, especially in the eyes of the Al'Auja farmers. The Al'Auja farmers do not expect their cooperation with Israelis to develop into a true partnership; rather, they expect that cooperating will give them access to valuable farming techniques and knowledge possessed by the Israeli agriculturalists.²⁴³ The asymmetrical relationship between the Al'Auja farmers and Israeli agriculturalists only serves to create distrust among the farmers, which a short period of contact by itself cannot overcome. The Al'Auja farmers' experiences of Israeli occupation negatively influence the expectations they have of cooperating with "the other." Despite this initial people-to-people exchange, trust has not been fully established between the Al'Auja farmers and Israeli farmers. Post-conflict reconstruction theory suggests that establishing such trust is a critical element of productive cooperation.²⁴⁴

Counter to the Israeli agriculturalists, who are recipients of support from the Israeli government, the Al'Auja farmers neither expect nor receive support from the Palestinian Authority

(PA). However, the municipality authorities are kept abreast of the AAVI.²⁴⁵ One Al’Auja farmer expressed that politics should be kept out of the initiative, and that the AAVI should continue based on mutually agreed upon interests.²⁴⁶ The farmers are open to continued transboundary engagement because it creates opportunities for them to learn better skills and techniques.

When asked about building peace through people-to-people engagement, several Al’Auja farmers responded negatively. One Al’Auja farmer responded to the researchers’ question by saying, “working with Israelis means nothing. It is not a partnership. It is only help.”²⁴⁷ Farmers engage with the initiative primarily to improve their living conditions. Instead of peacebuilding, farmers expect an “exchange of experience.”²⁴⁸ The farmers do not have expectations of peace and feel that peace needs to be established first by the governments before they can engage in peace-based activities with one another. Otherwise, overt cooperation with Israelis, particularly cooperation involving settlements, contributes unacceptably to normalization.²⁴⁹ The AAVI has created an impetus for Al’Auja farmers to continue cooperating with Israeli agriculturalists and AIES for the purpose of receiving information.

5.3.2 Israeli Agriculturalists in the Arava Valley

Israeli agriculturalists’ expectations of the AAVI are shaped by the physical environment in which they do their work. The Arava Valley is a very harsh landscape. Yet in this desert, a series of plantations rise from the rocky ground. The arid surroundings contrast sharply with the thriving cultivated land, and this particular environment influences the expectations that the community has regarding the AAVI. The expectations of Israeli agriculturalists can be divided into several different categories: autonomy, support structure, and people-to-people engagements.

One expectation is that farmers should be autonomous. One interviewee said that Israeli agriculturalists had the attitude that farmers should be able to live off the land and create solutions

to their own problems.²⁵⁰ This sentiment is embedded in the notion that the Israelis created their own desert agricultural industry. The specific attitude is that the process of date farming had to be learned through experience, not taught by an instructor. This expectation impacts how agriculturalists in the Arava Valley view capacity building for farmers. One ramification is that this group does not feel that they have a large amount of time or resources to spare. They face their own economic pressures. Another ramification is that the date farming industry that they have created is part of the broader Israeli state, and sharing information with “the other” can be problematic.

This belief in self-reliance is also connected to the concept of peacebuilding. One perspective from this group is that solutions have to be implemented by the affected actors. One individual observed that, “you can’t solve conflicts, you can make conflicts better, but they have to solve it for themselves.”²⁵¹ The “you” mentioned in this particular observation is somewhat ambiguous, but it appears to encompass politicians, the international community, and development workers. In contrast to the Al’Auja farmers, Israeli agriculturalists believe that peacebuilding has to come from Palestinians and Israelis themselves in addition to the politicians. The Israeli agriculturalists also believe that outside actors involved in this area can help make peacebuilding occur more easily, but cannot independently create peace. This expectation of outside actors directly impacts how the Israeli agriculturalists view the ways that NGOs can impact the AAVI.

With regard to people-to-people engagement, some of the Israeli agriculturalists in the Arava Valley do not believe that they have anything to gain from the Al’Auja farmers.²⁵² Those with that sentiment do not see an opportunity to build deeper relationships with Palestinians over an extended period. These agriculturalists are open to limited cooperation. For example, one agriculturalist was unwilling to physically travel onto Palestinian land to troubleshoot farmers’ problems there, saying that this would cross a personal boundary.²⁵³ It is important to be cognizant of these differences in expectations, most notably along the lines of people-to-people engagement. Neither the Israeli

agriculturalists nor the Al'Auja farmers interviewed expect a genuine 50/50 partnership to result from this initiative. Both Israeli and Palestinian participants expressed a similar sentiment: that a genuine 50/50 partnership does not presently exist within this initiative. Both groups are somewhat cynical that such a relationship could flourish in the long-term. This negative expectation stems from Israelis' concern over market competition (discussed further in section 4.3), along with a belief that people need to learn for themselves. Some Israeli agriculturalists view their cooperation with the Palestinian farmers as an act of charity rather than a mutually beneficial relationship, which further indicates that the Israeli agriculturalists do not expect to benefit from transboundary farmer-to-farmer engagement.

5.3.3 *AIES*

Consistent with its mission, AIES aims to play a leading role in research, conservation, environmental protection, and sustainable development in the region.²⁵⁴ Although the mission aspires to transcend political barriers and achieve environmental change, it is important to understand what AIES's principals expect from this cooperation. Based on the interviews, peacebuilding is emphatically not the primary expected outcome. One interviewee aptly stated, "I'm not in the peace business. I'm in the environmental business."²⁵⁵ Working for the environment, rather than for peace, was a consistent expectation across multiple principal groups. With so much uncertainty in the political sphere, there is a strong reluctance to proclaim one is explicitly working for peace in the Middle East. Under the current asymmetric power dynamic, any construct of peacebuilding between Israel and Palestine must constantly wrestle with the contention of normalization. Normalization, as outlined in Chapter 3, denotes a Palestine without sovereignty.²⁵⁶ Working within the current climate could indirectly support an increased Palestinian dependence on the Israeli State. Such an act would contradict the goals and mission of this initiative which aims to

build both Israel and Palestine. Thus, it is unsurprising to find that AIES interviewees rally behind the less contentious topic of the shared environment.

As indicated by the formal BIP contract, there is an expectation that this effort will be conducted transparently as a coexistence project between Israelis and Palestinians. One interviewee noted, “the relationship is built on a contract, not on trust or dependency,”²⁵⁷ though certainly varied levels of trust and dependency impact what participants expect out of this project. AIES expects to use its transboundary connections and capacity for environmental education to build mutually beneficial partnerships, particularly through farmer-to-farmer engagement.²⁵⁸ When AIES approaches Israelis to be a part of this movement, there is an expectation (based on precedent) that responses will range from overt racism, to fear of market competition, and even to a genuine desire to join in cooperation.²⁵⁹ While some AIES staff champion a shared tangible benefit through the construct of farmer-to-farmer engagement, it was striking that many of the Israeli agriculturalists in the Arava who were interviewed do not perceive direct benefits outside of the opportunity to engage with Palestinians.^{260, 261, 262}

In working to bring people together in hopes of breaking down barriers, there is also an expectation of open communication. Open communication, however, comes with caveats. One AIES principal notes a desire to shy away from media attention, although that runs somewhat counter to donor demands.²⁶³ Avoiding the public spotlight is also a means of circumnavigating political entanglements, which could be detrimental to the building of these transboundary relationships. Some staff expect, for example, that anti-normalization discourse is to be avoided while focusing instead on cultivating a common language around shared environmental concerns such as climate change. Others expect that the building of genuine relationships will empower communities to have a stronger voice in ending the occupation,²⁶⁴ further illuminating the heterogeneity of expectations within AIES.

5.3.4 PWEG

PWEG expects farmers to focus on their core competency of farming. PWEG expects farmers to utilize the technical tools that are being developed to meet their needs and build their capacity. PWEG does not expect the AAVI to have significant peacebuilding potential, but they do see the possibility of “peacebuilding as a side effect”²⁶⁵ of development projects. The primary change that PWEG expects to see is improved long-term development in Al’Auja through better livelihoods for farmers. By supporting farmers and reducing their financial and resource burdens, PWEG expects to improve their livelihoods. The most tangible expectation that PWEG has of the initiative is the return on investment for the PV grid within five years.²⁶⁶

5.4 Concerns

5.4.1 Al’Auja Farmers

While some of the farmers gave positive feedback about the AIES site visit, one was concerned that the Israeli agriculturalists were not transparent in sharing information.²⁶⁷ One specific concern was that critical information on removing air pockets within dates was purposefully not shared. Whether or not the information was intentionally withheld, the experience left the Al’Auja farmers with a degree of distrust of the Israeli agriculturalists.²⁶⁸

There are also trust-based challenges within the Al’Auja farming community itself. One of the trust-based concerns is that some farmers are selling their dates for lower-than-market prices. This undercuts the market price that other farmers are able to receive.²⁶⁹ Another concern is that some farmers are hiding low-quality dates in bushels underneath good quality dates. Overall, these concerns spring from a lack of formal cooperation among the farmers, as well as the absence of regulation and standardization of date marketing practices, all of which lead to competition among neighbors.

The farmers also relayed a myriad of practical concerns about their need for better infrastructure.^{270, 271, 272, 273} The Al'Auja farmers lack proper storage that would allow them to wait to sell their dates at a time when they would receive a better financial return. The farmers also have several water-related concerns, including water loss from aging infrastructure, groundwater salinity, and the inability of off-the-grid farmers to obtain permits for artesian wells. The most immediate concern was that the farmers who financially committed to the upkeep of the PV grid were not experiencing any of the return on investment that they had expected.²⁷⁴ The PV system is still not connected to the main energy grid, and as a result, the farmers are not receiving energy credits. Therefore, Al'Auja farmers are still forced to focus on short-term concerns rather than solving long-term problems.

5.4.2 Israeli Agriculturalists in the Arava Valley

Israeli agriculturalists identified concerns over possible competition and a lack of reciprocated benefits if they work with Al-Auja farmers. Though some Israeli agriculturalists do not see the Al'Auja farmers as competition, they perceive that the benefits of the AAVI are primarily focused on the Palestinians. One interviewee spoke at length about the competitive advantage Israeli agriculturalists have over Palestinian farmers and stated that he does not see them as competition. This interviewee went on to say that he does not believe the Al'Auja farmers have the sophistication and technical knowledge necessary to rival the Israelis.²⁷⁵ The difference in economic opportunity and prosperity between the two groups creates a sense of patriarchy and hierarchy in the relationship that reflects the power asymmetry of the region. In addition, the unequal distribution of benefits from the AAVI means that the Israeli agriculturalists do not have much of an incentive to participate in the initiative. These factors could hinder the development of a long-term partnership between the two groups.

The Israeli agriculturalists expressed a concern over price stability if Palestinian farmers were to successfully produce cheap medjool dates.²⁷⁶ Palestinian farmers have two advantages over the Israelis: low labor costs and access to European consumers who have boycotted Israeli goods. Although some of the Israeli agriculturalists purported not to see the Al'Auja date farmers as competitors, they are threatened by their future potential. For example, there is an expressed concern that cheaper dates could depress market prices.²⁷⁷ Furthermore, there is a fear of losing market share if Palestinians were to expand their areas of export. It has been reported that Israeli growers struggle with competition in the Western European markets from farmers from other Mediterranean nations.²⁷⁸ There is a particular concern over the boycotting of Israeli goods, a sentiment that was echoed in our interviews.^{279, 280} Overall, some Israeli agriculturalists are concerned that participation in the AAVI lacks any obvious benefits for them, while the initiative empowers Palestinian farmers who may eventually pose a threat to the agriculturalists' livelihoods.

5.4.3 AIES

AIES interviewees have a number of concerns related both to the AAVI and to cooperation with Palestinians more generally. In terms of success of the AAVI, there is a concern about having too many stakeholders involved since it complicates communication.²⁸¹ As a result of communication issues, the AAVI recently encountered a problem in which an outstanding debt was not paid to activate the electricity credits from the PV array in Al'Auja. There remains confusion about who should have paid it.²⁸² Language barriers also make working with Arabic-speaking Palestinian farmers difficult.²⁸³ While some AIES staff speak Arabic, language remains a core impediment to creating change through people-to-people interactions. The language barrier hinders the ability to establish meaningful relationships and can act as a division between Israelis and

Palestinians. Importantly, some of AIES's 2017 funds have been designated for Arabic language lessons, which will help bridge the language divide.²⁸⁴

Some AIES staff also worry that the AAVI might contribute to normalization. They fear that the initiative could lead to development without empowerment,²⁸⁵ thus reinforcing and normalizing asymmetric power dynamics.²⁸⁶ On a separate note, some staff are concerned that too much media attention could be problematic for the AAVI due to the highly politicized nature of the cooperation, which could negatively impact the ability of both individuals and partners to effectively carry out their work and support communities.²⁸⁷

5.4.4 PWEG

PWEG is concerned about securing sufficient funding.²⁸⁸ They are committed to environmental protection and are developing and expanding mechanisms for wastewater treatment that need funding. Additionally, getting enough community buy-in has proven difficult as a result of some Al'Auja households' focus on short-term costs over long-term benefits.²⁸⁹ The high investment cost of the household wastewater treatment systems makes some people reluctant to install the system in their homes.²⁹⁰ In order to maintain high levels of participation and buy-in from Al'Auja farmers on the AAVI, PWEG is meticulous about what is communicated to the farmers as a means of managing their expectations.²⁹¹ There is a noted concern that if farmers' expectations are not properly managed, PWEG could lose face within the community if promises made cannot be kept.²⁹² This is not about meeting farmers' expectations; rather, it is more a function of not allowing them to be raised beyond what could feasibly be delivered. Because of the difficulty in communicating the long-term environmental and economic benefits of these systems, PWEG remains concerned about not being able to widely expand the use of these systems.

PWEG is also concerned about project expansion more generally due to the difficulty of operating outside of Area A. For example, one interviewee noted that there is a desperate need for water infrastructure projects to assist Palestinians living in Area C, but PWEG does not have permission to operate there. The wall and settlements make infrastructural continuity impossible, limiting options for centralized solutions. As a result, PWEG's work is limited to decentralized projects, which gives rise to concerns about long-term expansion.

5.4.5 Government

The highly politicized environment in the region makes communication and any coordination between Israeli and Palestinian government agencies extremely difficult. Both the IWA and the PWA voiced concerns about the other playing politics with technical issues related to water accessibility in the West Bank and the environmental state of groundwater.^{293, 294} The IWA is specifically concerned about the failure of the PWA to share information regarding their projected water use.²⁹⁵ This lack of information sharing is often interpreted as the PWA making a political statement, further stalling cooperation. This lack of cooperation makes it difficult for the PWA to create projects in areas like Al'Auja, which makes it necessary for NGOs such as PWEG and AIES to assist the community through initiatives such as the AAVI.²⁹⁶

Another important finding is that the PWA is concerned about the JWC's failure to convene.²⁹⁷ As a consequence of the JWC not meeting, the PWA must choose between providing water to their people and running the risks that the Israelis will destroy unauthorized water infrastructure projects.²⁹⁸ As a result, the PWA must utilize household and community-level water initiatives such as PWEG and AIES's AAVI, which circumvent the JWC.²⁹⁹

5.5 Aspirations

5.5.1 Al'Auja Farmers

The farmers in Al'Auja have many clear and specific aspirations for the AAVI. These aspirations pertain to both development and peacebuilding, but the majority fall under the category of development. To clearly identify what the Al'Auja farmers are hoping to achieve through their continued cooperation, we separated their aspirations into the following categories: business, community-building, technical, and people-to-people aspirations.

One of the most clearly articulated aspirations is the desire to have better marketing strategies and opportunities, including increased access to the date markets.^{300, 301, 302, 303, 304, 305, 306, 307, 308} Market access is an essential aspect of livelihoods that is commonly restricted in conflict environments.³⁰⁹ Current impediments limit the markets in which the Al'Auja farmers can sell their products without a middleman. The use of a middleman significantly decreases their financial returns.³¹⁰

Aside from simply access to markets, the farmers aspire to have strong marketing plans and strategies.³¹¹ As previously mentioned, the farmers currently set their prices separately, which devalues the true price of the dates and forces the other farmers also to sell their dates at below market value.^{312, 313} The resultant decreased income is even more concerning because sapling and seedling survival is not where it needs to be, which results in a lower crop yield.³¹⁴ Farmers hope to see an increase in plant survival in the near future.³¹⁵

The farmers would like to continue benefitting from their participation in the AAVI, and to see their community benefit as well.^{316, 317, 318} Their overarching goals are to secure their livelihoods and ensure that they maintain possession of their land.³¹⁹ They want to “become strong”³²⁰ and believe that with increasing international market demand, the date palm industry has the potential to improve their livelihoods.^{321, 322} Their hope is for more farmers to be included in the initiative with

an equitable distribution of the benefits.^{323, 324, 325, 326} Some also hope to increase their labor force, which would create more jobs in the community.³²⁷

Some of the farmers expressed a desire to see a co-operative implemented.^{328, 329} The co-operative would allow the farmers to set market prices and make marketing and financial decisions as a single entity.³³⁰ It is important to these farmers that they, not just the NGOs, take ownership of the co-operative formation.³³¹ While an external source of information and training might be welcome, the farmers fear that unless the effort is self-motivated, the co-operative will not be effective or sustainable.³³²

In addition to their community aspirations, the farmers also have important aspirations concerning the technical aspects of their water supply and the PV grid. Their desire to have continuous access to an adequate water source is arguably their most important aspiration.³³³ Their ideas for achieving this include water catchment and storage systems and a study on the potential for water harvesting in the wadis. A few farmers are even interested in exploring desalination (though this would likely be costly).³³⁴

Furthermore, the farmers aspire to have the AAVI address their farms' problems. For example, one farmer mentioned that he would feel more secure on his land if he had the ability to capture and store water.³³⁵ With the ability to capture and store water, he would have a backup water source for the times in which his main water supply is either unavailable or simply cannot meet his needs. The same farmer also mentioned that a lot of the water from the Al'Auja spring is lost to ground absorption in the first few 100 meters.³³⁶ He would like to see this area paved to prevent the water from seeping into the ground.

The farmers also have high hopes for the PV grid. They would like it to be expanded so that it can offset 100 percent of their electricity costs for the water pump.^{337, 338, 339} The water pump's electricity costs, without the use of solar energy, range from about 3,100 – 5,300 U.S. dollars per

month.³⁴⁰ Those who are not yet connected to the PV system are hoping to be connected in the near future.^{341, 342} While the PV system is expected to provide significant financial benefits, as previously stated, it was not yet connected at the time of our interviews and the farmers wanted the situation corrected.

The farmers also hope to receive marketing assistance and improve their financial practices through their continued participation in the cooperation;^{343, 344} one farmer mentioned specifically the desire to see a budget in place for continuous electricity payments.³⁴⁵ Some of the farmers think women could play strong leadership roles in the areas of financial management and marketing.^{346, 347} They believe that the women are capable of marketing their products successfully and would like to see the women involved in future marketing opportunities and training.³⁴⁸ When asked, some of the farmers stated that they consider women to be highly capable of financial management, and that they would like the women to be involved in any financial training.³⁴⁹ As noted in section 3.5, an effective gender strategy can strengthen the social and economic well-being of communities.³⁵⁰

Our research team was unable to speak with any women from Al'Auja. However, the male Al'Auja farmers conveyed their own aspirations for the women of their community. While women generally work in the packing houses, some of the farmers expressed an aspiration to see the women make artisanal crafts.^{351, 352} For example, they would like to see the women make a product called *ajwa*.³⁵³ *Ajwa* is a paste used in pastries. It is made by crushing the dates that are unfit for the market because they have too many air pockets or are misshapen.³⁵⁴ *Ajwa* has traditionally been made by women in other areas in which date palm farming is practiced, notably in Gaza.³⁵⁵

In times of conflict, people from the opposing sides working together to build and improve livelihoods fosters peaceful cooperation that can lead to partnerships.^{356, 357} All of the Al'Auja farmers stated that they do not consider their cooperation with the Israelis on the AAVI to be a partnership because of the overwhelming disparity in their rights, resources, and privileges.^{358, 359}

However, establishing these professional connections through peaceful cooperation is still very important for the future possibility of partnership and has implications for peace in the region.³⁶⁰

Although the Al'Auja farmers do not see the relationship with the Israeli farmers as equitable, the farmers in Al'Auja make it clear that they want to continue the cooperation they have started with the Israeli agriculturalists. They have benefitted from working with the Israeli farmers and believe that there is still more to learn, particularly in marketing and storage. As one Al'Auja farmer stated, any project in their village is a good sign for the future.³⁶¹

Al'Auja farmers hope that in cooperating with the Israeli agriculturalists, any requested information will be forthcoming.³⁶² Some of the farmers felt that pertinent information concerning farming techniques was being withheld by the Israeli farmers during the first meeting (perhaps the Israeli agriculturalists' concerns about competition played a role in this). They aspire to have future cooperation with Israeli agriculturalists who truly want to help and are willing to be honest and transparent in the process.

The Al'Auja farmers' aspirations for the AAVI to contribute to peacebuilding were difficult to obtain since most of the farmers were reluctant to broach the topic at all. Yet, one Al'Auja farmer expressed that they do desire peace for the region.³⁶³ When asked if this initiative contributes to peacebuilding, he said that he believes peace between the people can contribute to peace between the governments. Even more compelling was his conclusion on the topic – "I believe in peace. We hope that one day peace will come and we can live as neighbors." ³⁶⁴

5.5.2 Israeli Agriculturalists in the Arava Valley

Israeli agriculturalists in the Arava Valley have a variety of aspirations for the AAVI and future cooperation with the Al'Auja farmers. While mostly development-based, some of the

aspirations also pertain to peacebuilding. We categorized these aspirations into three categories: aspirations regarding business, the community, and people-to-people relations.

Despite some Israeli agriculturalists' concerns over competition, others believe that there is enough room in the date market for both Israeli and Palestinian farmers.^{365, 366} It is the expressed hope of several Israeli agriculturalists that the Palestinian farmers will partner with the Israeli marketing company used by the Israeli agriculturalists, Hadiklaim.^{367, 368, 369} However, it should be noted that our team learned that this marketing company also works with illegal settlements.³⁷⁰ Thus, the Al'Auja farmers partnering with Hadiklaim would contribute to normalization and violate PWEG, AIES, and the Al'Auja farmers' ethics. For this reason, we do not recommend pursuing this aspiration. The Palestinian date farmers should not be encouraged to partner with Hadiklaim, unless and until a resolution to the wider conflict is reached.

Some Israeli agriculturalists hope to see the water supply in Al'Auja and Jericho increased.³⁷¹ They are truly moved by the struggle that the Al'Auja farmers face, and they wish to help improve the conditions for them in whatever ways they can.^{372, 373} Their main aspirations are to help the Al'Auja farmers access usable water and improve their farming techniques.

Going forward, some of the Israeli agriculturalists are hoping for greater cooperation between the Israeli and Al'Auja farmers, especially around marketing and packaging. It is important to note that some of the Israeli agriculturalists wish to ensure an equal distribution of initiative benefits between the Al'Auja farmers and the Israeli agriculturalists. An interesting aspiration that was voiced by one stakeholder and well-received by some of the Israeli agriculturalists was the idea to create a shared date brand between the Israeli and Al'Auja farmers. This would be marketed as an Israeli-Palestinian date to show the international community that, in the professional sector, the farmers within the region are cooperating peacefully. While an inspiring idea, this would require thorough assessments on proper approach and marketing, which we address in our

recommendations section. Again, it is important to note here that the marketing company currently used by the Israeli farmers should be avoided. A so called “peace date” cannot be marketed by a company that works with the illegal settlements occupying Palestinian lands and perpetuating the conflict.

5.5.3 AIES

AIES has broad aspirations for its partnership with PWEG. These aspirations encompass both peacebuilding and development, and can be broken down into four main categories: aspirations concerning technical project aspects, business, community-building, and people-to-people relations.

One short-term aspiration expressed by AIES was the creation of a maintenance framework to keep the PV systems running.³⁷⁴ Eventually, AIES envisions the creation of a locally run utility to manage the maintenance and installation of new PV systems in Al’Auja.³⁷⁵ By training community members in the technical, financial, and management aspects of conducting PV panel installation, upkeep and repair, PWEG and AIES could create a self-sustaining utility that provides labor and services to the local economy.

AIES imagines that their partnership with PWEG would be more powerful if it were structured as a large “umbrella” project encompassing a number of smaller projects. Each of these projects would have its own source of funding and deal with separate but related issues.³⁷⁶ As the initiative evolves and receives more funding, AIES would like for a larger proportion of the funding to be put toward project implementation rather than assessment.³⁷⁷ One of the AIES representatives stated that only 40% of the BIP project funding actually went toward implementation.³⁷⁸ This individual believes that the learning stage prior to implementation ought to be shorter.

AIES would like to see the cooperation between Palestinian and Israeli farmers lead to mutual economic advantages. One possible way for Israeli agriculturalists to benefit from

cooperation with the Al'Auja date farmers is through improved access to markets. The aforementioned idea of Palestinians and Israelis jointly marketing a shared product was discussed; Palestinians would benefit from the marketing and packing expertise of the Israelis, while Israelis could gain access to markets typically closed to them for political reasons (mainly in the Arab regions). This particular idea will be discussed in greater depth in the Recommendations section of this report.

The community-related aspirations expressed by the AIES primarily focused on the Palestinian farming community. There was a clearly stated desire to improve the living conditions of the Palestinian farmers, as well as to create livelihood and environmental sustainability for Al'Auja. There was an emphasis on designing future programming solely around the needs of the farmers and expanding the initiative to include farmers who are not landowners.³⁷⁹

AIES representatives also made reference to gender-specific aspirations. There was recognition that if women are to be involved in the initiative, it will be necessary to find a woman, preferably a Palestinian woman from Al'Auja to engage them.³⁸⁰ AIES concurs with both the Al'Auja farmers and PWEF in that capacity building, particularly in areas like marketing, presents an opportunity to incorporate a gender dimension into the AAVI.

Through this initiative, AIES aims to create bridges for peace between Israelis and Palestinians.³⁸¹ The hope is that both Israeli agriculturalists and Palestinian farmers will benefit from the relationship building that might result from farmer-to-farmer interaction. The AAVI is instrumental to realizing this aspiration.

5.5.4 PWEF

In partnership with AIES, PWEF hopes to scale up different parts of the AAVI in Al'Auja. It would also like to develop a pilot model in other communities based on the successes that the

AAVI has seen thus far. Furthermore, PWEG hopes that the Al'Auja farmer participants will encourage others in their community to install systems similar to those that the AAVI has provided. Both organizations hope that the date farmers will continue to offset the high cost of electricity by utilizing this more sustainable option in pumping groundwater for their date palms. Since only 45 farmers are assisted through the AAVI, PWEG hopes that these farmers will assist others to install similar systems and adopt similar practices.³⁸²

PWEG hopes to see the livelihoods of the Al'Auja farmers' become sustainable through their participation in the AAVI. It wishes to continue providing tangible benefits to the farmers, including training to improve their business techniques. PWEG shares the farmers' aspiration to see their marketing and financial practices improve, and hopes that the AAVI will be able to provide the necessary resources to do so. It is PWEG's aspiration that by organizing and cooperating with one another, the Al' Auja farmers will have a better understanding of their financial capacity and enter into fair business contracts.

PWEG values its cooperation with AIES and believes the Al'Auja farmers received useful information on date cultivation techniques from Israeli agriculturalists during the AIES site visit. When asked about the implications of working with Israelis, one interviewee implied that ethnic group identification does not hinder their ability to cooperate with one another.³⁸³ PWEG will continue to welcome relationships with organizations that share the same ideology and aspire to protect the environment and develop underprivileged communities. Those who aspire to the same goals will be able to develop and maintain a working relationship within the challenging ethnopolitical climate.

Lastly, PWEG hopes that the AAVI can create employment opportunities for women. A specific gender strategy was not originally incorporated into planning; however, it became apparent in the course of our research that there is potential for women's involvement, which would produce

more benefits for the community. Because date cultivation is labor-intensive, it does not allow the farmers, most of whom are men, to be involved in all aspects of commercial date farming. When asked about the roles women can have in accomplishing the initiative's business management goals, PWEG sees potential for them to play a leading role in finance and marketing. As one interviewee noted, "we are supporting a family business. Everyone benefits. It's not limited to just the men."³⁸⁴ PWEG also sees an opportunity for women to participate in the date sector through the making of *ajwa* paste from dates not suitable for market.

5.6 Conclusion

We analyzed our Findings in terms of synergies across actor groups, possible tensions and disconnections, and unexpected findings for our research team. This categorization brings to light areas that present opportunity for growth as well as areas that may warrant attention or management. This analysis serves to inform future decision-making. A few words are thus warranted on the synergies, divergences and our unexpected findings.

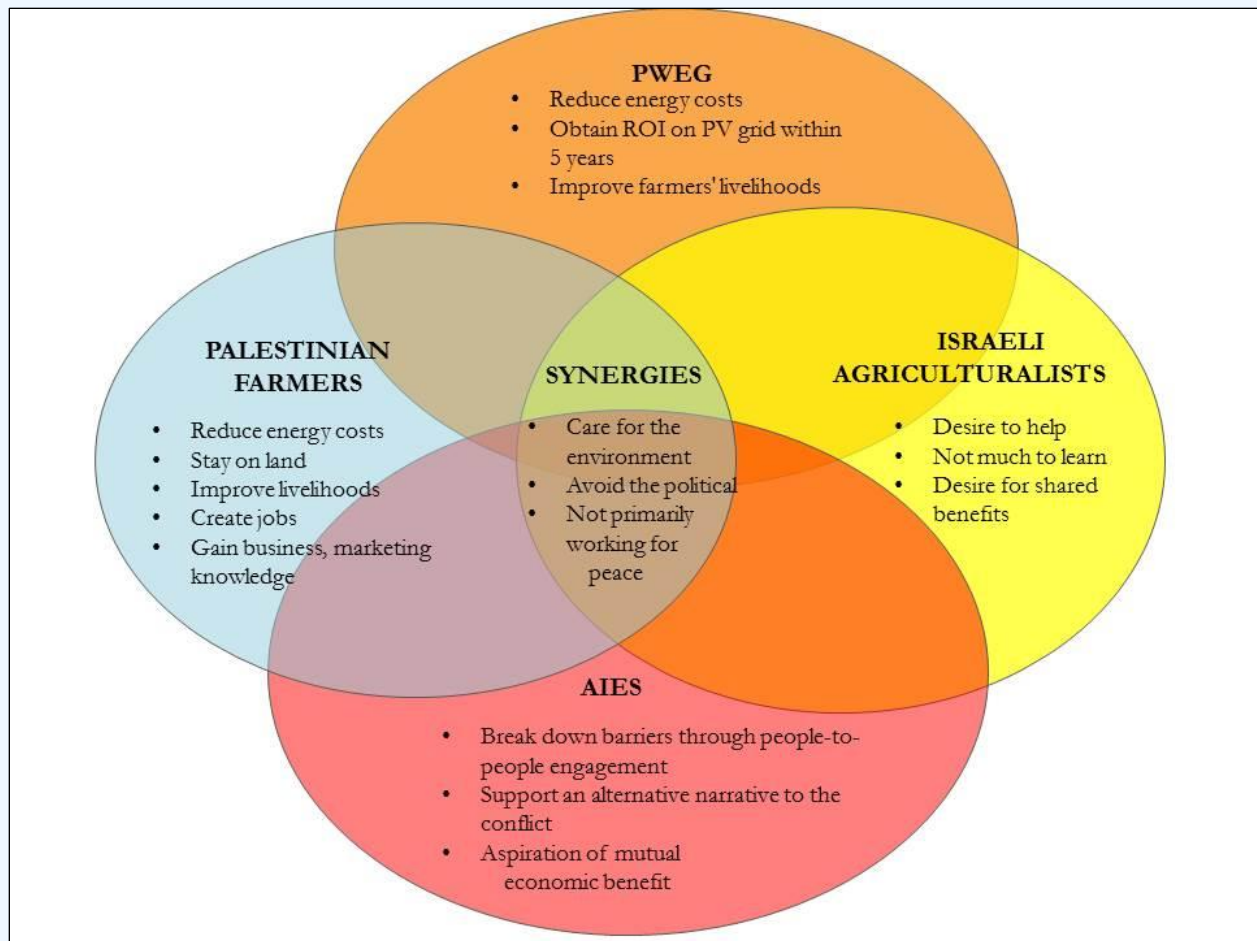


Figure 4. Venn diagram illustrating key stakeholder synergies and divergences.

Synergies (see Figure 4)

1. **Equal distribution of benefits is desired across actor groups.** There is a clear wish to continue this transboundary farmer-to-farmer engagement. However, the Al'Auja farmers want to see the benefits equally distributed within their community, whereas the Israeli agriculturalists want the distribution of the AAVI benefits to be more equally distributed between themselves and the Al'Auja farmers. As is further discussed in the Recommendations section, moving forward, the structure of benefits distribution should be assessed.

2. Environmental action around shared community-centric concerns can be scaled up.

AIES and PWEG both value their shared environment and wish to work towards environmental sustainability. In terms of the future, AIES hopes to train more community members; this goal is well-aligned with PWEG's train-the-trainer approach toward expansion of household wastewater systems. This shared aspiration for future growth through a bottom-up, community-based approach presents a valuable opportunity for expansion of the existing cooperation.

3. The partners share similar long-term financial aspirations that can be better aligned.

An AIES representative relayed a desire to have a larger percentage of funding dedicated toward implementation rather than assessment efforts. PWEG is focused on securing funding for additional technical projects, such as household wastewater treatment systems, that support building sustainable communities. Without additional context, these financial aspirations appear harmonious, though open communication with regard to financial planning will be important.

4. Politics are to be circumnavigated and peace is an afterthought. Despite the differences in expectations, there is a striking synergy across principal groups who wish to avoid the toxic entanglements of the political sphere, which is largely believed to impede progress. Virtually all interviewees see the politics as an entity to be artfully dodged. For the majority of the interviewees, building peace is unequivocally not the primary expected outcome of this initiative. Instead, most seemed resigned to the expectation that the governments will come to an agreement in the distant future, although it is interesting to

note that Israeli agriculturalists saw the value of third-party actors supporting peacebuilding efforts. Regardless, peace remains a strong concern across all groups with its unavoidable footprint on gender, livelihood, and state-society relations, despite the fact that it was not expressed as a part of most stakeholders' MECA regarding this initiative.

Divergences (see Figure 4)

- 1. Actions toward a transboundary date co-operative or shared date branding need to be approached with caution.** The Israeli agriculturalists stated an aspiration to partner with the Palestinians under the premise of utilizing an Israeli date marketing company. However, without clear indication that the marketing company does not also work with settlements, this is not recommended. Pursuit of either a transboundary co-operative or shared date branding through an Israeli marketing company will need to be carefully reviewed.
- 2. Israeli project participants may be navigating competing goals.** There is a noted concern in our research findings about Israeli agriculturalists withholding information. However, it must be noted that within the context of the AAVI, the Israeli agriculturalists are being asked to navigate two priorities that are often polarized: building Israel versus building Palestine. Advanced farming techniques, for example, are considered part of the Israeli state. Finding Israeli actors who agree to be forthcoming about sharing information to build the Al'Auja farmers' capacity will be paramount moving forward.
- 3. Both Israeli agriculturalists and Al'Auja farmers share concerns about stable date market pricing, although they different reasons for those concerns.** Some Israeli agriculturalists fear market competition, particularly since Palestinians have lower production

costs and could potentially offer dates at cheaper market prices. Within Al'Auja, farmers are concerned about their own lack of quality control. Date prices, package quantity, and quality are not standardized in the Palestinian markets. In insecure environments short-term needs (paying an electricity bill) often take priority over the long term, leading farmers to sell their dates below market rates. Although their concerns differ, both Palestinians and Israelis want stable date market prices.

Unexpected Findings

- 1. There is support for a counter-narrative to the conflict.** The most salient motivation expressed by AIES is the desire to present an alternative narrative to the Palestinian and Israeli conflict. Notably, doing so appears to allow several stakeholders to reconcile their Israeli identity with their moral identity, which motivates them to help others. Furthermore, international donors are intrigued by the notion of a counter-narrative; thus this presents itself as an opportunity for further exploration by the partners.
- 2. Even non-project actors with competing interests find common ground.** Although classified as non-project actors, the PWA and the IWA present surprising areas of synergy and disconnect. The PWA is highly motivated to decrease its dependency on Mekorot by establishing independent water systems. While the PWA seeks control over its own water resources, the IWA simultaneously remains frustrated by the lack of timely data and information-sharing from the PWA. Despite such challenges, both agencies place a high value on their respective professionalism. This was repeatedly expressed by both parties. It is striking to see how self-identity and group-identity as technical experts, as engineers, and as business professionals persist in often challenging political circumstances

Chapter 6 | Recommendations



Chapter 6 | Recommendations

6.1 Introduction

Based on our findings, our team developed eight specific recommendations for AIES and PWEG. These recommendations are presented in three different categories: improving the AAVI within Al'Auja, strengthening the relationship between Israeli and Palestinian stakeholders, and widening out engagement in the AAVI. The goal of these recommendations is to inform future project planning between AIES and PWEG. These recommendations incorporate literature on scaling up, which is relevant as these two NGOS seek to expand their partnership.

6.2 Improve the AAVI in Al'Auja

6.2.1 Create Capacity Building Mechanisms to Improve Agricultural Output and Economic Performance

We recommend that AIES and PWEG continue to assist the Al'Auja farmers in developing their ability to store and market dates. The farmers' capacity to sell dates on the international rather than the local market can be strengthened through improved storage and refrigeration capacity as well as effective product marketing. Our rapid appraisal evaluation indicated that the Al'Auja farmers have a strong interest in improving their capabilities in these areas. The BIP Pre-Feasibility Study uncovered that, “weak marketing facilities are a result of poor grading, filling, transport, and storage of the products. This is due to an internal inadequacy in the export sector, which is comprised of weak technical support, management, and financial infrastructure of small projects and companies.”³⁸⁵

Experts should be brought to Al'Auja to facilitate trainings and workshops. Ideally, the experts would be neutral third parties without any stake in the AAVI. In addition, a mechanism for

farmers to provide pre-workshop input as well as post-workshop feedback should be created in order to ensure that trainings and workshops address the most urgent needs of the farmers. The topics that farmers expressed interest in during both the BIP Pre-Feasibility Assessment and during our rapid appraisal are listed below. Training in these topics will develop the farmers' capacity and has the potential to improve their livelihoods.

- 1) Marketing and Sales
 - a) Export markets
 - b) International date supply and demand
 - c) Packaging design
 - d) Distribution logistics
- 2) Accounting and Finance
 - a) Agricultural insurance
 - b) Market pricing
 - c) Understanding contracts
 - d) Return on investment principles
 - e) Forecasting techniques
- 3) Production and Packing
 - a) Improved date quality
 - b) Pest control
 - c) Expertise in disease prevention
 - d) More effective picking processes
 - e) Storage and refrigeration techniques
 - f) Other methods for boosting date palm survival and decreasing product spoilage

6.2.2 Determine and Create the Ideal Type of Co-Operative for Al'Auja's Farmers

Based on the success of the Israeli marketing co-operatives, we recommend PWEA and AIES conduct a co-operative feasibility study to explore the possibility of creating a co-operative for the Al'Auja farmers. Packaging and marketing mechanisms, similar to those utilized by Israeli co-operatives, will be beneficial to the Al'Auja farmers as their dates begin to mature over the next three years.

Although Al'Auja farmers do not belong to a formal co-operative, the farmers perceive themselves as cooperating with one another. Their cooperation involves assisting one another in

harvesting as they pool resources to share labor and tools.³⁸⁶ We found that although this is helpful, the lack of an official co-operative has also produced further market competition among farmers. Multiple Al'Auja farmers expressed interest in forming a co-operative with the purpose of selling together instead of against one another.^{387, 388, 389}

While the Al'Auja farmers feel they can benefit by forming a co-operative, a feasibility study must be conducted to determine the best type of co-operative for this group of farmers. Despite the farmers' expressed interest in starting a co-operative, our team identified organizational and implementation challenges to doing so. One farmer explained that he had tried to form a co-operative around livestock management, but failed due to a lack of community buy-in.³⁹⁰ Depending on the type of co-operative formed, management could be time-intensive, and farmers would need to decide on a system for task management. A feasibility study would determine what type of co-operative would be most likely to succeed in Al'Auja, based on farmers' expressed needs and willingness to participate. For example, a co-operative might take the form of a community packing house, in which the costs of packaging dates are shared, or it might extend to date marketing and help create price standardization and stabilization mechanisms. While it seems clear that some form of co-operative could help address farmers' problems with the selling of dates, the feasibility assessment is a crucial first step to designing an effective co-operative for the farmers.

6.2.3 Ensuring Equitable Distribution of Benefits within Al'Auja

AIES and PWEГ should ensure that their investment is spread throughout the community in order to distribute benefits as equitably as possible. PWEГ and AIES should be aware of the gaps the AAVI has created between those farmers who have benefited from the initiative and those who have not. Interviews with Al'Auja farmers revealed that there is concern about an unequal distribution of AAVI benefits within Al'Auja itself. Farmers who are already beneficiaries expressed a desire for their neighbors to be included in the initiative, and those farmers who have not

benefited expressed a desire to participate. As the AAVI moves forward, it is recommended that PWEG and AIES consider an expansion of benefits to as many farmers as possible to strengthen the Al'Auja farming community as a whole. Our team recognizes that decisions about infrastructure expansion are best made by PWEG, and it is not always possible to allocate resources equitably within a community. However, it is important to note that the Al'Auja farmers perceive an inequality in the distribution of tangible benefits within the community, and both included and excluded farmers identified this as an issue. Where infrastructure expansion is not an option, benefits may be more evenly distributed through capacity building workshops and inclusion of all interested farmers in the formation of any future co-operative.

6.3 Build the Israeli-Palestinian Partnership Among Farmers and Agriculturalists

6.3.1 Reinforce People-to-People Engagement between Palestinian Farmers and Israeli

Agriculturalists

We recommend that AIES and PWEG create another opportunity for Al'Auja farmers and Israeli agriculturalists to engage with one another. While the previous site visit between Palestinian farmers and Israeli agriculturalists took place in the Arava Valley, AIES and PWEG should explore the possibility of Israeli agriculturalists visiting the Al'Auja community. In order to effectively meet the initiative's people-to-people mandate, the AAVI should continue to create opportunities for Israelis and Palestinians to interact. Despite the travel restrictions imposed on Palestinians and Israelis, we find tremendous value in this transboundary engagement. The town of Al'Auja is in Area A; as such it is not permissible for Israelis to enter. However, there are agricultural fields surrounding Al'Auja that are in parts of Area C,³⁹¹ which could potentially provide suitable locations in the vicinity of Al'Auja that are accessible to both Israelis and Palestinians. Having the site visits take place in the West Bank and close to Al'Auja addresses several of the stakeholders' identified

limitations and concerns. Since Palestinians living in the West Bank must obtain a permit to enter Israel, it is easier for Israelis to visit Palestinians in the West Bank than for Palestinians to cross into Israel.

Furthermore, being able to see the location and the circumstances of date cultivation in the West Bank allows Israeli date farmers to share more specific agricultural knowledge. Basing the program in the surrounding areas of Al'Auja contributes to the community's local ownership. Additionally, Palestinian farmers who were unable to attend the training in Israel will benefit if the program is located in the West Bank.

AIES and PWEG should build a constituency of Israeli agriculturalists who truly want to participate in an engagement opportunity with Palestinian date farmers. Our interviews revealed that while some Israelis were motivated to help Palestinians, others were more hesitant. People-to-people engagement between Israelis and Palestinians will ensure the long-term success of the AAVI, but such meetings function to advance trust and cooperation. Willing participants on both sides are necessary for this to be successful, and it is important for AIES to be careful and deliberate when choosing Israelis to visit Al'Auja.

6.3.2 Create Equitable Distribution of Benefits between Israelis and Palestinians

AIES and PWEG should explore opportunities to create a more balanced distribution of AAVI benefits. In its current configuration, the AAVI distributes benefits unequally between Palestinian and Israeli farmers. Because Palestinians reap almost all of the material benefits of the initiative, Israelis may be discouraged from participating, undermining the people-to-people aspirations of AIES and PWEG. If AIES and PWEG continue to focus exclusively on members of the farming communities, they must consider how to change the Israeli agriculturalists' perception that they have little to gain from participating in the initiative. Our research showed that while some Israeli agriculturalists are interested in sharing their knowledge and expertise with Palestinians, even

those who are interested in cooperation acknowledge that they have little to gain in terms of tangible benefits. Unfortunately, our team does not currently see a clear path to ensuring equitable distribution of benefits from the initiative. The political and economic power asymmetry of the region makes this a difficult task. However, we recommend that future practicum teams focus on this area when carrying out their research, and that AIES and PWEG study the issue whenever possible in order to identify a solution. If this is not properly addressed, Israelis may lose interest in the initiative, and it will continue to be difficult to attract new Israeli participants. This could diminish the effectiveness of the AAVI, particularly with regards to people-to-people engagement.

6.3.3 Consider, Under Specific Conditions, Joint Branding of Dates

AIES and PWEG should exercise caution if they consider the joint branding of Israeli and Palestinian dates. Due to the highly regional politicized context, “peace date” branding could be highly contentious. Furthermore, normalization acts as a barrier to the execution of this idea. Currently, dates produced by Israeli settlers are marketed alongside dates from the Arava Valley through Hadiklaim. Since there is value in pursuing a joint effort between the two agricultural groups, we recommend that AIES and PWEG explore the option of jointly branded dates cautiously. Joint branding would likely allow Israeli dates to bypass BDS campaigns, which would bring a tangible benefit to Israelis. Palestinians would benefit from Israeli expertise in packing and marketing as well as securing higher market prices. Jointly branded dates do not necessarily warrant the complete integration of dates from Al’Auja into the Israeli marketing system. For example, such a cooperation could entail a product that utilizes both dates from Al’Auja and a kibbutz in the Arava Valley. This product could be sold in a niche market instead of on a large scale.

6.4 Widen out Engagement in the AAVI

6.4.1 Incorporate Women and Gender into the AAVI

Our team recommends that AIES and PWEG explore the addition of a gender dimension to the AAVI by conducting a gender sensitivity assessment. Great care should be taken to devise an approach that integrates women into development and peacebuilding projects in a contextually sensitive way. The assessment will determine where it will be appropriate and feasible to formally include women in the AAVI. Ideally it will also reveal opportunities for women to play a greater role in the economic life of the community. Based on the cross-section of community sentiments we collected, our research indicates that there is space for women to be incorporated into the AAVI and play an active role within the agricultural industry in Al'Auja.

Depending on the results of the gender sensitivity assessment, we suggest AIES and PWEG design a gender strategy that responds to the farmers' areas of need, as noted in both the pre-feasibility study and during our rapid appraisal. Furthermore, management training and financial practices are two primary areas for improvement that have been identified by farmers.^{392, 393} Giving women the opportunity to fill these gaps could benefit the community as a whole.

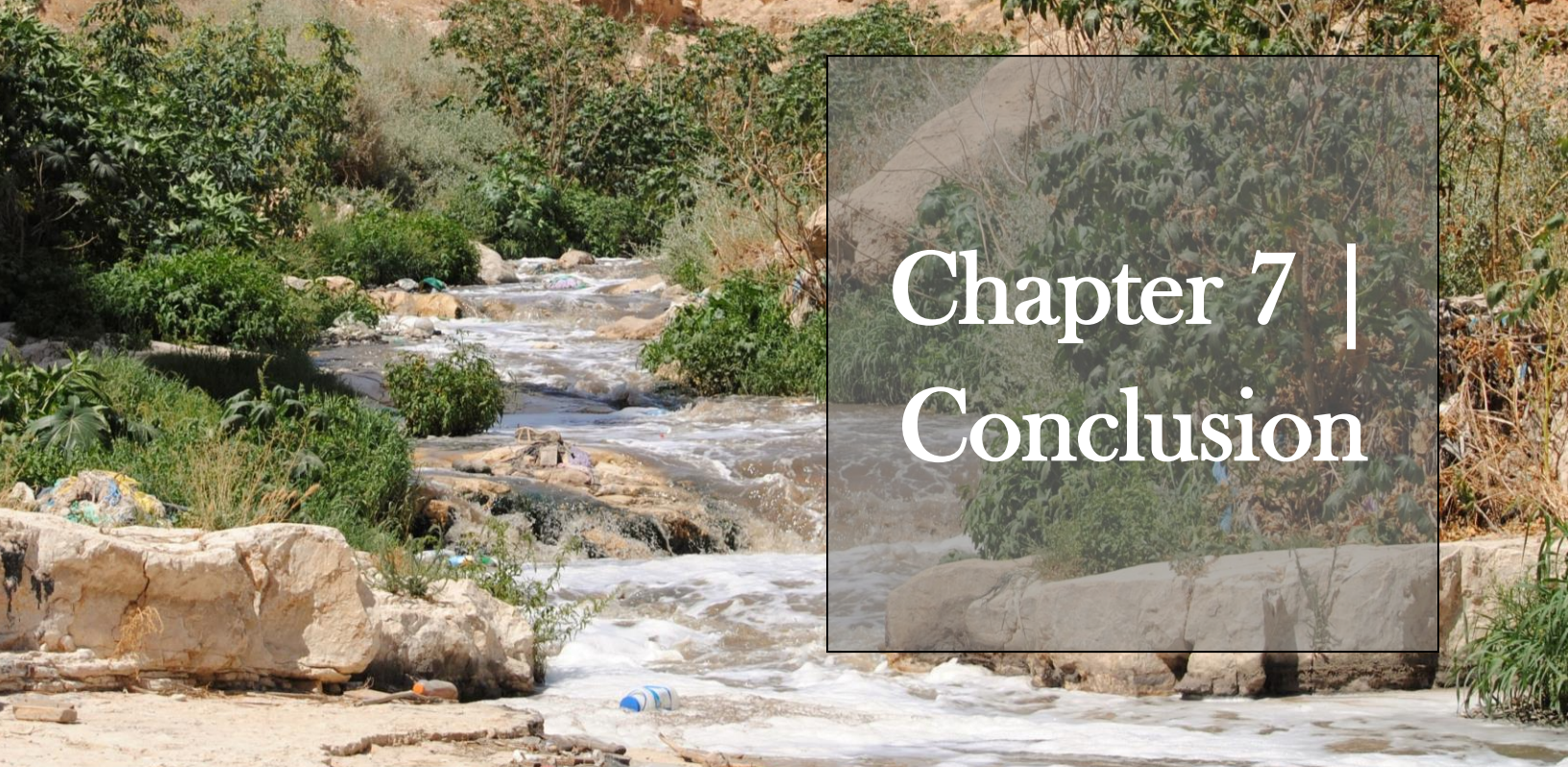
The lack of effective gender integration throughout the existing AAVI is a concern, although simple inclusion of gender into projects does not necessarily empower women in a political or economic sense. Farmers, NGOs, government institutions, and stakeholders confirmed the value of gender integration across multiple levels of the AAVI. This points to the need for a gender sensitivity assessment.

6.4.2 Build Partnerships with Schools

AIES and PWEG should reach out to schools in Al'Auja and the Arava Valley to explore the possibility of bringing youth into the AAVI in order to create a more sustainable initiative. The

purpose of such an exchange would be to educate Israeli and Palestinian youth about sustainable environmental management while exposing them to “the other.” Such an approach serves the dual purpose of advancing environmental awareness and decreasing intergroup hostility by creating positive interactions between Palestinian and Israeli children. AIES’s existing educational programs could serve as a jumping-off point when designing this new people-to-people project.

There are many ways this educational exchange could be carried out. One possibility is teacher exchanges between schools in Al’Auja and Arava Valley kibbutzim, in which teachers from Al’Auja could travel to the Arava Valley and vice versa. Interactions could also take place via video conferencing, which could bring children together virtually. Such a program could focus on environmental education for all age groups in schools willing to participate. Environmental education will raise community awareness of the themes of the AAVI and could generate more interest in farming from younger generations. Furthermore, such a program could focus on trust and relationship-building, which are central to peacebuilding and AIES’ theory of change. The concept of “the other” could be changed dramatically for children that participate in such an initiative.



Chapter 7 | Conclusion



Chapter 7 | Conclusion

While official relations between Israel and Palestine remain tense at best, in certain sectors civil society actors have begun to forge relationships that bridge the political, social, and economic divides separating Palestinian and Israeli society. Such is the case with the partnership between PWEG and AIES. Their cooperation on projects pertaining to the food-water-energy nexus addresses issues of vital importance to participants' livelihoods. PWEG and AIES' work has the potential to contribute to grassroots peacebuilding by bringing together members of different communities in the pursuit of common goals. The two organizations have helped deliver effective household-level greywater reuse systems in the West Bank as well as cost-saving PV panels for farmers in Al'Auja. They have also begun to foster people-to-people relationships between the Al'Auja date farming community and Israeli agriculturalists in Arava.

“Development” is an umbrella term that comprises issues of human capacity and the availability of material resources. Together, PWEG and AIES have begun to address capacity building through the creation of workshops that offer learning opportunities to farmers. The next step is for the partners to determine a program for capacity building that more closely aligns with project participants' expressed needs. The BIP project has directly addressed issues of material resources, helping to free up capital for farmers by installing PV systems that will lower their electricity bills. One missing element that has been identified is an effort to ensure that benefits from the initiative are distributed equitably between Palestinian and Israeli participants and also among the Al'Auja farmers themselves. A partnership in which only one side benefits is no partnership at all.

Our team hopes that the recommendations put forth in this report prove helpful to AIES and PWEG as they expand existing projects and seek to undertake new ones. Moving forward, we

hope that PWEG and AIES's cooperation will continue to improve the AAVI and the livelihoods of participants in the initiative.

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