



COMMUNITY  
ENERGY  
TECHNOLOGY  
IN THE MIDDLE EAST

## **“Like water for the thirsty...”**

# Renewable Energy Systems in Palestinian Communities in the South Hebron Hills

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Translated from the Hebrew by Deb Reich

> Comet-ME's solar panels in Shaeb el Buttom, a village of approximately 250 residents using renewable energy as their only source of power. Photo: Tomer Appelbaum, November 2011.



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## Introduction

### Part I

### Part II

### Part III

In the south Hebron hills, many Palestinian communities, living under Israeli military and civilian control, are obliged to manage without a connection to the electric power grid, even when it passes within a few meters of their homes. The families of meager means that comprise these communities struggle against all odds – without infrastructure, running water, or electricity and with severely circumscribed freedom of movement – to continue to subsist on dry farming and raising animals. For the past two years, Comet-ME has been installing, one step at a time, renewable energy systems using solar and wind power to generate electricity for these communities.

This paper addresses the impact on these communities of the introduction of the new infrastructure – impact already evident in the short range. The writing is based on field work that spread out over a period of six months between September 2011 and February 2012. The field work included observing both the installation process of the renewable energy systems and their use. Most of the time was spent in one community which serves as the basis for the description and analysis presented below. Visits were also made to additional communities, including one in which these renewable systems have been operating for about two years.

<sup>1</sup> Field work was conducted at the end of the summer and during the fall and winter, with just a bit of early spring. The intensive period surrounding the harvest, at the end of spring for example, is completely absent. Clearly, then, the pretensions of this paper are limited and the picture it portrays is only partial. It should be viewed as a preliminary platform for a continued learning process and the additional fieldwork required.

<sup>2</sup> The use of refrigerators only began toward the end of my fieldwork in the community I was focusing on. I learned about the importance of refrigeration from other communities but did not observe the daily use they made of it. Thus the discussion of the implications of having refrigeration will be limited and preliminary.

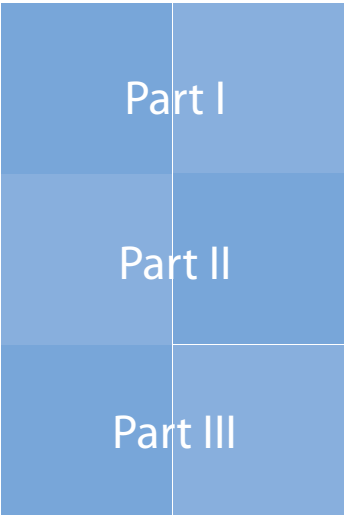
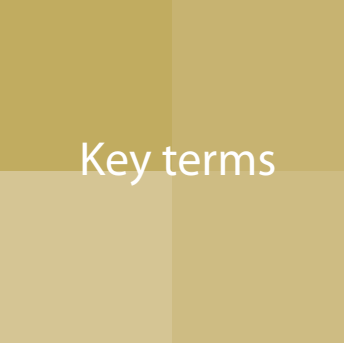
During the six months in the field, I stayed with many families who opened their homes to me; I spent time with the women and their children, with teenagers and adults and became familiar with their unique way of life. I was there as the family went about its daily routine, and I followed the changes in that routine as the seasons and the weather changed.<sup>1</sup> I also witnessed the changes in these routines that resulted from the limitations on freedom of movement for these families and from the restrictions on their construction options put in place by the Civil Administration and the Israeli army, as well as by their settler neighbors, who have imposed themselves on these communities. With all this as the backdrop, I observed the process of installing the renewable energy systems and their influence on the daily lives of the various families and the community as a whole.<sup>2</sup>

In the first section of the paper, I will present the general outlines of the historical, political, environmental and sociocultural context that broadly explains the mode of existence of the communities in that particular space. The second part of the paper offers an overview of the impact of the installation of the electricity system on that mode of existence. The third section provides a brief insight into the images of and relationship between Comet-ME and one of the communities as they developed over time.

Families of meager means struggle against all odds – without infrastructure, running water, or electricity and with severely circumscribed freedom of movement – to continue to subsist on dry farming and raising animals. For the past two years, Comet-ME has been installing, one step at a time, renewable energy systems using solar and wind power to generate electricity for these communities.

> Members of the Jundya and Awad families next to the wind turbine in Tuba, where Comet has also installed 10 solar panels providing power to the entire community. Photo: Tomer Appelbaum, July 2012.





Misfera

subsidiary villages and nomadic area close to the small town of Yatta. In this space, the shepherds and farmers habitually moved between one area and another, according to the seasons of the year and the residues of vegetation, making optimal use of available pasture. In this nomadic area the subsidiary villages of Yatta came into being, next to the agricultural lands of their residents.

Khirbeh

a small village or hamlet. This is the term applied to the small subsidiary villages of Yatta. Note that this word should not be confused with the similar-sounding Hebrew word “churbah” meaning a ruin (ruins). Ruins are also found within the *misfera*. A *khirbeh* might be located near such ruins. But just as well it might be located at a site where there are none. Throughout the text the word *Khirbeh* (Arabic) and hamlet will be used interchangeably.

Family

A family in this paper refers to an extended family that includes a husband, a wife or wives, their married sons, sons’ wives and offspring, and any unmarried sons and daughters.

Hamoula

a clan or group of families with a common ancestor, with various degrees of kinship ties between them (plural: hamoulat).

Community

a group of families, sometimes comprising a single hamoula and sometimes from several hamoulat, living in the same *khirbeh*/hamlet, with each having its own agricultural land nearby.

Domestic space/family space

consists of various structures and the space between them. The home is not limited to one structure, but rather the whole domestic space is considered the family house. Its various rooms are located at a distance from one another and some are underground. The herd is thought of and described as a part of the domestic space. Domestic space and family space are used interchangeably in the text.



## General background: The historical, environmental, political, economic and sociocultural context

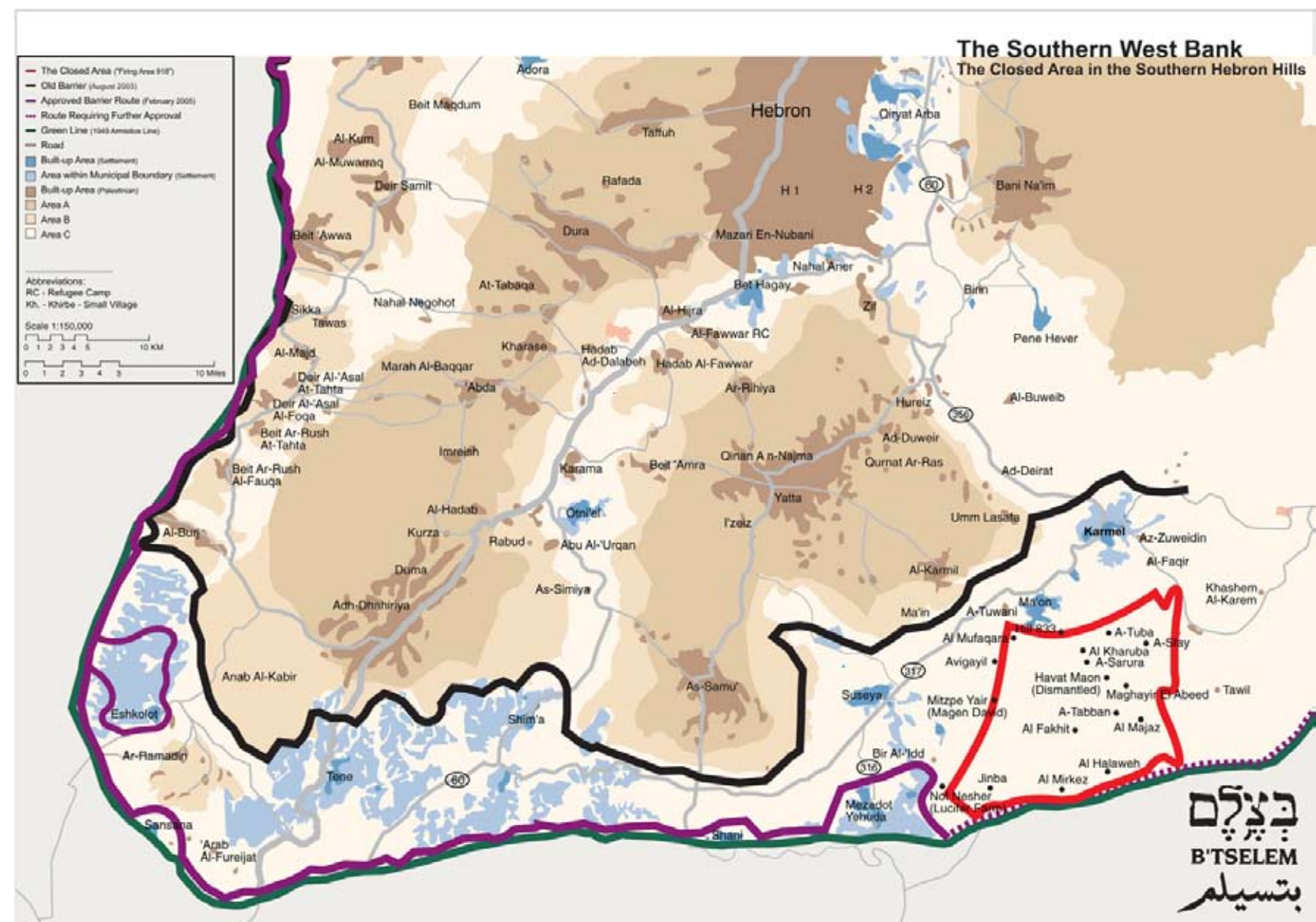
## Historical overview

In the areas close to the small towns of Dura, Yatta, Samu'a and Dhahiriya, there are dozens of small villages where Palestinian farmers make a living by raising sheep and cultivating extensive agricultural areas. This reality was described in detail in relation to the area around Yatta (also the focus of this paper), in a report published by the Ministry of Defense at the end of the 1970s.<sup>3</sup> As stated in that publication, the exodus from the mother villages, including Yatta, to the spaces around them began in the first third of the 19th century and continued through the latter part of the British Mandate and the early part of Jordanian rule in the West Bank.<sup>4</sup> In Yatta as elsewhere, families that split into branches due to natural increase, those who did not have the means to purchase land in Yatta itself, ventured out to seek farmland and pasture areas beyond the immediate vicinity of the mother village.

Over the years, what began as a seasonal departure, with temporary lodging for a few months in nearby caves, became permanent. The caves became primary dwellings for a large proportion of the families, especially the poorer ones. These families rehabilitated and renovated the caves, which are abundant in the area, and used them as housing for themselves and shelter for their animals. In this way, over many years, they were able to forge a basic standard of living in a traditional, "pre-consumer" society. Today we encounter families in which a great-grandfather, grandfather, father, and son, all were born and raised and have lived in and around the same cave, in the same *khirbeh*, in the *misfera*.

Misfert Yatta, as this zone is known, is found on the eastern ridge of the higher elevations of the Hebron hills: a semi-arid area facing the Judean desert. Due to the altitude of the ridge, this area enjoys rainfall to its east, which in turn made it possible to settle there, relying on non-irrigated farming, water holes and pasture land for part of the year.<sup>5</sup> **The irregularity of the rains and their alternating dispersal in time and space has led many families to purchase land in more than one place, so as to exhaust the potentiality of pasture and arable land.**<sup>6</sup>

Under Jordanian rule, as the elderly residents recall, the society in the *Misfera* became well established and the number of people residing there grew. There was no room in the mother village to work large areas of land, let alone to use as pasture for the herds and many family members spent the major part of the year in the *khirbeh*, working their lands and taking care of their herds there. It seemed as though these subsidiary villages would expand and grow into larger ones, severed from the mother village, and in some cases that is indeed what happened.<sup>7</sup>



The South Hebron Hills > Courtesy of B'Tselem – The Israeli Information Center for Human Rights in the Occupied Territories.

<sup>3</sup> Ya'akov Havakuk, *Living in the Hebron Hill Caves*, Ministry of Defense Publishing, 1985 [Hebrew].

<sup>4</sup> Ibid, p. 26.

<sup>5</sup> In recent years, global warming and desertification have been perceptible in this area, too, and the residents are plagued by recurrent drought and increasing water shortages and, in their wake, inadequate pasture and poor crop yields.

<sup>6</sup> Today, flexible movement around these spaces is no longer possible; families worry about leaving their homes even for short periods of time lest settlers take over their lands and the areas that provide their livelihoods. Pasture areas near the Green Line (the armistice line between Israel and the West Bank until 1967) are closed to Palestinian shepherds and the flexible mobility so crucial to their way of life is denied them.

<sup>7</sup> See, for example, the villages of Shuweika, Qarmel and Beit 'Umarah, all in Area B, which is under Palestinian civil and planning control, and have not suffered the restrictions on development that have been imposed on villages in Area C, under full Israeli control.

## The Israeli occupation

The 1967 Six-Day War and the Israeli conquest and occupation that followed, created a new reality in the region. The Israeli occupation penetrated many aspects of existence and the residents found their lives profoundly influenced by the new and shifting reality. The first dramatic impact was in the realm of work and wages. It began forthwith, in the second half of 1967, when workers were able to exit the West Bank and work in Israel. The other dramatic and traumatic impact was the Israeli settlement enterprise that began during the 1980s and launched the continuing conflict over land and the attempts to expel the Palestinian residents from it.

### Employment and economy

During some 25 years, Palestinian farmers were exposed to a new and expansive job market and to the Israeli economy in general. Many of them remember this era nostalgically, mainly from the standpoint of income and the feeling of wellbeing they enjoyed, but also in regard to the social relations created then with Israelis. The differences in standard of living between the two societies enabled even Palestinian workers, being paid the lowest wages, to earn much more than they were accustomed to, and the families in Misfert Yatta accumulated surplus income at a level unknown to them in the past. Meanwhile they were exposed to a wider range of products and their consumption grew. Most if not all of this consisted of imports from Israel. The relative proximity to places of employment and the income gaps between the wage-earning workers and the shepherds created greater momentum toward working in Israel. Most families sent a son or two to do day labor in Israel, while the rest of the family continued its routine, working the land and raising the herd. In some cases entire families sold their herds and moved to Yatta, which underwent a construction boom and a degree of urbanization. The families' standard of living rose. New markets offered new materials for construction and thus the process of transition from the caves to living on the land outside them accelerated. Some built houses of stone, while others bought tents for the summer, and went back to living in the caves, in the winter.

A change began following the outbreak of the first Intifada. Working in Israel became increasingly complicated, dependent on work permits that became harder to obtain, until, following the killing of nine Israeli civilians and six Israeli security forces personnel by Palestinians in 1993, Israel imposed a general closure on the Occupied Territories "until further notice."

The Israeli occupation penetrated many aspects of existence and the residents found their lives profoundly influenced by the new and shifting reality.

The Oslo agreements raised expectations that the closure policy would change. However, these were not realized. In fact, Israel intensified its closure policy in the intervening years, in reaction to terrorist acts within its borders.<sup>8</sup>

The Oslo Accords created a new political and economic reality. Yatta was classified as Area A, which means under Palestinian rule and administration, but all of its *misfera* area belongs to Area C, which is under Israeli control for both security and civil purposes. This Israeli responsibility has not translated, under all 44 years of occupation thus far, into any sort of caring for the needs of the residents: provision of infrastructure, development plans, training or employment programs, or anything related thereto have all been absent. Thus, when in 1993 the borders were closed and with them access to work in Israel was disrupted, the Palestinian workers found themselves in a hopeless situation, without an alternative to employment in Israel. The Israeli regime refrained from caring for them and their needs; not only did the regime not initiate, it actually prevented them from pursuing any progress in development, construction or infrastructure, while the space that was their home and their livelihood was changing before their very eyes and their free movement within it was being increasingly restricted.

Many ex-workers looked for employment in Yatta and its environs, mostly in vain since the economy was completely dependent on the Israeli labor market. In the end, many went back to the hamlets in the *misfera*, while many others stayed mostly unemployed in Yatta. Fluctuations in restrictions on closure enabled few to work periodically in Israel, until the outbreak of the second Intifada in 2000 when that option became no longer possible.

<sup>8</sup> B'tselem report, "Crossing the Line", 2007, p.15-16



## Introduction

### Part I

Today, too, the job market in Yatta is limited and the supply of unskilled labor is greater than the market's demand. The economic development being promoted by the Palestinian Authority has not reached the geographic and social periphery of Palestinian society. A fraction of young people, those with post-secondary education, have joined the labor force as teachers in the area's schools. An even smaller fraction is working in engineering, mostly in Hebron. Meanwhile, in recent years work permits for employment in Israel have been issued very sparingly, only to men over the age of 30, based on demand among Israeli employers and granting no permission to stay overnight. Most of this work is not permanent and the workers remain unemployed for long periods.

### Part II

### Part III

Alongside those with permits, many young people who, because of their age, have no prospects of obtaining permits, are working without them and periodically are caught in Israel and imprisoned. Wages in Israel are double and sometimes three times the wages paid in Yatta, and the temptation is such that it is difficult to resist, especially for a young man who wants to build a house and start a family and whose parents are too poor to offer him any substantial help.

### The settlement process and the state

Alongside the changes in the labor market there began, as noted, a process of settlement by Israeli Jews in the *misfera*. The land became a resource in great demand and the focal point of conflict. Accordingly, there began a series of attempts, both oblique and direct, to expel Palestinians from the *misfera* area. New permanent construction was banned in the entire *Misfera*, and large swaths of it were declared firing zones, meaning closed military zones where no residence is permitted. During the 1980s, four settlements were built in the area, on property that had been declared state land and, at the end of the 1990s, after the Oslo Accords, another four outposts were erected without any authorization. In 1999, about 700 people were effectively expelled from their homes in the *Misfera*, and only after a legal and public campaign was this process halted temporarily by a decree from the High Court of Justice, but the program was never actually cancelled.<sup>9</sup>

Within the whole *Misfera* there was but one master plan produced (for the small village of At-tuwani). All other hamlets remained with no plans that could have regulated their planning status and would have allowed them infrastructure and orderly construction. Moreover, the free movement with their herds that these shepherds must have (relying on open pasture, and rainwater) was restricted on various pretexts without any alternatives having been offered, such as provision of running water and a source of food for the animals. Meanwhile the

<sup>9</sup> At the end of March 2000, the HCJ decreed that, until another decision is reached in the matter, after clarification of the relevant facts, the status quo should be preserved as it was just before the eviction notices were issued and the petitioners be permitted to return to the area to live there and pasture their animals there, as they used to do. Concerning clarification of the relevant facts, a mediation process failed in 2005. "The sword of expulsion: Violence, harassment and non-enforcement of the law in the south Hebron hills," B'Tselem, July 2005 [Hebrew]. Also see report by The Association for Civil Rights in Israel: <http://www.acri.org.il/en/2012/07/25/firing-zone-918-infosheet/>.

The Civil Administration issues and executes demolition orders for sheep pens, water holes and tents, as if there is no natural growth, as if herds do not increase, as if the new generations must all live only in caves – underneath the land rather than on it.

settlements and outposts were expanding and creating additional constraints on freedom of movement in these spaces. Nearly every family in the various hamlets had been hurt physically by settlers, this over and above the harm to property, sheep, trees and water holes.

In the last few years, things have been somewhat calmer and it appeared as though some kind of status quo had taken hold. But lately, the policies of the Civil Administration, the army and the settlers have been made tougher once again.<sup>10</sup> The Civil Administration issues and executes demolition orders for sheep pens, water holes and tents, as if there is no natural growth, as if herds do not increase, as if the new generations must all live only in caves – underneath the land rather than on it. Moreover, the settlers try to prevent Palestinian residents from grazing their herds or tending their crops near the settlements, on a land which is owned by the Palestinian herders, and repeatedly beat, terrorize and threaten them, and in many cases the army simply turns a blind eye to these incidents.

There is no doubt that these two aspects of the Israeli occupation – the changes in employment possibilities for Palestinians within the green line, on the one hand, and the settlement policy on the other, with all their respective implications - explain to a great extent the changes and fluctuations that these communities have undergone in the last 40 years. All attempts to understand these communities have to take these two factors into account.

<sup>10</sup> See for example: *Susiya: At Imminent Risk of Forced Displacement* | March 2012 United Nations, OCHA; Rabbis for Human Rights, reports on damage to human rights in the occupied territories, at: <http://rhr.org.il/heb/index.php/category/human-rights>

## International organizations, Israeli activists and the Palestinian Authority

Integral to the context of the Israeli occupation is the presence and activity of UN aid organizations and other humanitarian, development and peace organizations, both local and international. These organizations enter the void created by Israel's denial of its obligations towards the population under its rule, and offer crucial help to the Palestinian communities, so that they can survive despite the restrictions imposed by the regime. In drought years (and the last few years have all been drought years), they help by financing excavation of water holes and offering subsidies for the purchase of water and straw and grain for the sheep. In the autumn they supply wood for fuel and large tents to serve as housing. Without these, the population could not have withstood the restrictions on mobility, employment, and construction imposed upon them.

International and Israeli peace activists are a conspicuous factor in the south Hebron hills. They frequently serve as buffers between schoolchildren or shepherds and the settlers, and they speak out in the media and to the Israeli public as well as to foreign audiences. The limited authority of the Palestinian Authority (PA) in Area C leaves it with very limited options. Hence it is a barely perceptible presence, and the limited activity it performs is enabled through funding and encouragement by the international aid organizations.

## Life in the *Khirbeh*<sup>11</sup>

### Way of life and social structure

The hamlets and the communities living in them are comprised of patrilineal families with various degrees of kinship between them. In some of the communities, the relatives are all members of a single hamoula, and in others there are two or three hamoulat represented. In each community there are at least two families<sup>12</sup> and in some there are as many as fourteen. The number of residents in a community averages about 50 to 75 people, but some communities are as large as 150 people or more. Upon marrying, young women go to live with their husbands' families in a different community, except in cases of marriage within the community, generally between cousins.

The family is generally, though not always in its entirety, a single economic unit, and the shared property it owns includes the agricultural land and the herd. The rhythm and mode of life for these families revolve around providing for the herd with the help of the land, on the one hand, and providing for the families with the help of the herd and the land, on the other.

<sup>11</sup> See Key Terms, p. 4.

<sup>12</sup> Ibid, p. 4.

- The herd's needs: Growing food requires ownership or leasing of land, working the land, and the digging of water holes. The search for pasture and for water sources requires spatial mobility. Buying food and water for the herds and for people (when the prior steps are insufficient) usually requires loans from suppliers, secured by unborn lambs, which creates perpetual debt.
- The family's needs: Natural growth of the herd – raising and selling male lambs and kids, and sheep for meat; production of milk products – milking the animals and producing the products, mainly butter and salty dried cheese. Self-produced agricultural products – Hubbez (local pita bread), olives and olive oil, summer fruits in some of the communities, vegetables in rainy years.

To perform these tasks, the family works cooperatively, with a clear division of labor among its members. Not all family members always work in the *khirbeh*. Needs change according to the farming cycle, the seasons of the year, the volume of precipitation, the life cycle of the herd and the life cycle of the family. A shepherd and his family members, including his unmarried sisters and some of his brothers' wives, will be joined by additional brothers according to the changing needs, and to alternative employment options that can supplement family income and the joint economic unit. Such alternative employment mainly includes day labor in Israel and occasionally in Yatta. Hence fluctuations in the Israeli enforcement of the prohibition on working in its territory, and the volume of work permits issued, influence the number of people present in the hamlet at any given time.

In addition to the need to earn a living, there is also a desire to provide education for the children and medical services for the sick and elderly. The *khirbeh*, however, is denied the possibility of filling these basic needs. Hence, children of school age will in most cases live in Yatta with their mother or an aunt during the week, and return home to the *khirbeh* on weekends, while women about to give birth, along with the elderly and sick who need daily medical care, will also remain in Yatta so as to be near a hospital. This is due to the complete absence of infrastructure in the *khirbeh*. The result is a lifestyle of perpetual movement between the two places based on lifecycle needs and fluctuations in the job market. Without passable access roads for vehicles, without running water or electricity, and given the prohibition on any building in stone, the *khirbeh* cannot develop and cannot establish basic institutions such as a mosque, a kindergarten or a small school.<sup>13</sup>

The family unit splits when the father dies and the herd and the land are divided between the brothers. In some cases, the brothers prefer to remain together and share a larger herd, dividing the work with the herd among themselves. In other

<sup>13</sup> The absence of infrastructure makes their very survival extremely costly for this population, perpetuating a life of poverty. On the one hand, the Israeli regime withholds the option of leading life as it once was: with free movement, digging water holes, etc. On the other hand, the regime also does not permit the construction of local infrastructure – running water, an electricity grid, etc. Thus the basic maintenance of life demands continual expenditures that are simply unrealistic for families with such limited resources.



## Introduction

### Part I

cases, depending on the size of the herd, the economic unit might be preserved, with only one brother being in charge of the herd. In that case he would be paid for his work. The other expenses and income connected with the herd would be divided among all. The brothers will work at outside jobs – as casual laborers in Israel or Yatta or as teachers, carpenters or technicians in Yatta or the vicinity.

The wives of those who work in Yatta or in Israel will frequently join the wife of the shepherd and help with housework and maintenance of the herd and its products. The husbands will come home on weekends, or as the need arises.

### Part II

All families living in the same community share a way of life, customs, and their daily routines. Relations between all of them are neighborly. Among families with major kinship – cousins, for example, or nephews – the relationships are more committed.

### Part III

Without passable access roads for vehicles, without running water or electricity, and given the prohibition on any building in stone, the khirbeh cannot develop and cannot establish basic institutions such as a mosque, a kindergarten or a small school.



> Left photo / Isma, a resident of Sha'eb el Buttom, performing routine household tasks. Photo: Tomer Appelbaum, January 2012.



> Right photo / Hajeh Nuzha of Sha'eb el Buttom prepares food for her family. Nuzha's husband was killed by a settler. She is now running the household with the help of her sons and their wives. Photo: Tomer Appelbaum, January 2012.

### Division of labor within the family

Men function and are dominant in the public sphere and women are responsible for the private/family sphere. The men go out to tend the herd. They are responsible for its protection, for its health and for its welfare. They are responsible for purchases for the house and the household, which are done in Yatta, and for selling the dairy and animal products produced by the family. In addition, the men are the ones who work the land—plowing and doing most of the harvesting. The olive harvest is done by the entire family, as is the planting of the summer crops, and some parts of the harvesting work. The men are also responsible for maintenance work in and around the domestic space and for the hospitality of guests.

Otherwise, the women are responsible for the domestic space, its upkeep and its economy. The economy of the home includes preparing food for family members and animals, milking, and producing the dairy products for sale. Upkeep of the domestic space includes sweeping up the sheep droppings daily, drying and carrying them to the taboun (free-standing oven) to be used as fuel; laundering clothes, cleaning the entire household area, preparing and distributing the animal feed to the feeding troughs, and hauling water up from the water holes which are at some distance from the household area.

The women work from morning till evening doing physical labor that involves carrying buckets of water, sacks of grains and mixed feed, cleaning, twice-daily milking (during about 5 months of the year), washing laundry by hand, and preparing the dairy products. The smaller children trudge along after their mothers as they work or find games to play using materials scattered around the area. The infants in cradles sometimes cry for a long time until their mothers are free to nurse them. The mothers must find way to address all their responsibilities, from feeding the animals to caring for their own children. When possible, an older woman – a grandmother or a second wife – cares for the little ones and the mother can devote herself to the tougher jobs. When one of the sons has a young bride, or there is a young adult daughter who is

> 3-year old Yara outside her home in Sha'eb el Buttum. The Khirbeh lacks a kindergarten or school. Children of school age normally live in Yatta with relatives and return home on weekends. Photo: Tomer Appelbaum, January 2012.

not studying somewhere, they will assist the mother in doing the harder jobs and she will have more time for the infants. Among the women themselves there is a division of labor by rotation that takes into account age and health (including pregnancy, for example). Despite everything there is no bitterness among the women. There is fatigue, and sometimes frustration and worry, but there is a sense of acceptance. Most of all there is reliance on religious faith and confidence in God (Allah).



### The family's domestic space

The family lives and operates in the domestic space. This space includes the people and the herd alike. It is important to understand that, unlike other forms of domestic organization, here the "home" is a combination of different structures and the space between them. Its various "rooms" are located at a distance from one another and some are underground. The herd is thought of and described as a part of this domestic space. The domestic space includes a tent of which the lower part of the walls is constructed as a fence. This is a kind of a hybrid creation, between a house and a tent – a product of the Israeli prohibition on building. It is divided into a sleeping space and a guest area, separated by a wall or by a stretched curtain. Outside this tent at some distance (to avoid the smoke), there is a kind of alcove, where the cooking is done over a fire, and beyond that the summer pen for the sheep, partly shaded in summer and covered with plastic in winter; nearby, there is an improvised platform on

which people sleep in summer while guarding the herd at night. At a distance, in a special structure, is the taboun – the oven in which the local bread, hubbez, is baked.

An organic part of the domestic space are the family caves, where in the past, the entire family lived. Nowadays, too, some of the families still use the caves as their principal dwelling, depending on the condition of the caves and the families' preference. Many of the caves are used for storage, shelter for lambs and pregnant sheep, winter kitchens, or places of refuge for both family and herd during especially tough winter days. Each family also has a basic toilet structure (donated by a humanitarian organization) and an outdoor storage structure for various tools and for the sheep feed in summer. Close to the domestic space there is a family water hole, and beside it a large cistern to be filled with bought water when the water holes dry up. At the edges of the domestic space is the donkey, improvised shelters for chickens and, occasionally, pigeons. The boundary is indicated by dogs. These are most definitely not part of the domestic space; rather they mark and guard its limits.

The entire space conveys a sense of functionality: when the residents are sleeping, the mattresses and blankets are spread out; afterwards, everything is folded and disappears, leaving an empty, bare space. When eating, all are seated around the food that is served; after the meal, the floor is cleaned and once again the meagerness and want are everywhere visible. The wife sits on a sack or on the bare floor; the elderly mother sleeps in a small tent where she also cooks and eats and, in the evening, spreads her mattress out on the ground so that the space becomes her bedroom. Life is oriented to doing and the doing is oriented to the needs of the herd which makes the family's subsistence possible.

The domestic space includes a tent of which the lower part of the walls is constructed as a fence. This is a kind of a hybrid creation, between a house and a tent – a product of the Israeli prohibition on building.



## Between poverty and survival

The standard of living among the shepherds' families has declined during recent drought years, as the purchase of water and food leaves many of them impoverished. The merchants in Yatta exploit the shepherds' cycles of financial insufficiency and the chronic lack of financial liquidity that most of them experience. In the summer and fall, a period during which the shepherds have no cash and are even required at times to borrow for food to feed the family, the merchants sell them animal feed as a loan at inflated interest. Against these loans, the merchants will receive in the spring, the newborn lambs and kids and the butter and cheese that are produced. The herd owners remain once again without cash. Their bargaining power, especially in arid years, is negligible and many carry debt from year to year to those same exploiting merchants.

This is one of the main reasons that land is so important to these communities. The land enables them to survive even when they lack cash, and it is the basis for renewing their cycle of subsistence yearly. As the rainy season approaches, all the farm land is plowed and planted in the hope that there will be plenty of rain. The sheep owners plow all of their land and lease additional land so that even a poor yield in lean years will provide a partial solution to the needs of the family and the herd. In rainy years, they also plant vegetables and summer crops in the wadis (stream beds) where the rainwater accumulates, mainly for domestic consumption. Along with the sheep, each family also raises chickens, mainly for the eggs and rarely for the meat. In some of the hamlets where climate is favorable, the sheep-herding farmers also cultivate small orchards for fruit, especially olives.

> Non-mechanized agriculture in Simre. As the rainy season approaches, all the farm land is plowed and planted in the hope that there will be plenty of rain. Photo: Tomer Appelbaum, November 2011.



> Member of the Awad family in Tuba preparing the feeding trough. The standard of living has declined in recent drought years, as the purchase of water and food leaves the shepherds impoverished. Photo: Eduardo Soteras, February 2010.

During the olive harvest season, the entire family is engaged in the harvesting, the women then prepare the olives and the men take them to the olive press. The oil and the olives will serve the family for the entire year, and the crushed residues provide food for the sheep. Beyond these products which, along with butter and dried cheese, comprise the lion's share of the family's food consumption, everything else is purchased in Yatta.

The family's means of transport is the donkey, and some families also have a tractor used for agriculture and for towing water cisterns. Once the water holes dry up, water must be purchased on a regular basis and transported in the cistern to the hamlet. Most of the residents hire the tractor owner to bring them water and other things as needed.

The major fixed expenditures are for sheep feed and for water (expenses that would be reduced by more than half, were free movement allowed). An additional major expense is incurred when sons are to be married. The major expenses that are not fixed but are anticipated in each family are those for healthcare and education.





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> Isma'il of Simre transporting water tanks with his tractor.  
Photo: Tomer Appelbaum, November 2011.



## Faith and religion

Nearly all men in the *khirbeh* pray five times a day. The women also pray. Some of the younger men do not pray, but they are all believers. Everything comes from God, so even after several years of drought, they stay hopeful for rain in the following year. Many of the men spend their Fridays at the mosque in Yatta, while the women remain in the hamlet. God's name, His acts, His will and His way, known only to Him, are often spoken of and are an integral part of daily discourse; God is the answer to what is not understood, He is the hope for what has not been attained, for change, for better days and for the ability to bear the difficult times.

The presence of God eases and comforts but at the same time serves to stabilize and reinforce the gendered power relations in the family, and legitimize marriages with two and three wives.

## On the meaning of community: between cooperation and aid

In each of the communities live several families,<sup>14</sup> some of them related and some from other hamoulat. Each extended family runs its own household. Full cooperation is found only within the family. Beyond the family, there are special relationships between first-degree kin – brothers who divided their late father's land and herd between them, and first-degree uncles and cousins. Help will be extended among them when requested, without expectation of payment. These are, however, open or long term debt relationships, characterized by indirect exchange ("today I help him to build his house; tomorrow his brother will loan or give me a sum of money to buy food for the sheep.") Beyond these relationships and still within the hamoula, neighborly relations include visits of men and women, mainly to borrow tools, ask for specific help or for consultation. Among the families from different hamoulat relations are characterized by respect, courtesy and higher level of formality. Help is given in times of emergency and otherwise for a fee as part of work relations. Sometimes there are also consultations with those considered experts, mainly about sheep diseases, or agricultural issues. Yet there is no institutionalized framework of cooperation among all the families, nor is there collective action or common space shared by the entire community.

The *khirbeh* society is a small community, everyone knows everyone else and what is happening in each family. They keep track of one another's accomplishments, failures or bad luck. The routine of daily life is shared by all the families and, with the changing seasons, the daily agenda varies in the same way for all. There is a sense of a shared destiny, yet each family is on its own.

<sup>14</sup> See Key Terms p. 4

## Introduction

### Part I

### Part II

## The impact of electrification

### Part III

### Uniqueness of the electricity system

In this section, I will describe in detail the varied impacts of renewable energy, which provides electricity to the community. These impacts fall into two mutually interdependent and interactive dimensions:

- The contribution to potential income and to free time for the residents.
- The contribution to community life on the individual, family and inter-family levels.

The systems installed in 21 hamlets in Massafer Yatta were planned and built with the aim of providing immediate solutions to the most urgent needs of the family and the community by promoting physical and economic survival, lessening the heavy burden of physical labor and facilitating a connection with the rest of the world. The systems are limited in output and do not provide for heating equipment and appliances that require high power. They were planned based on the needs of each community as surveyed by the Comet-ME team, with the understanding that there will be a certain amount of growth in needs over time.

<sup>15</sup> At this initial stage there is still some dependence on the installation and maintenance crew. This, however, is very different than a dependence on the central government.

<sup>16</sup> This analysis does not stem from existent discourse, it is rather a suggested perspective, for future observation.

For people who experience daily dependence on the forces of nature for water, sunlight, pasture, and indeed survival, for those who try desperately to adapt their life to drought, the burning sun and the thirsty land, a system that takes advantage of burning sun and blowing wind, provides a new dimension to their relations with nature – one that is a bit more balanced, empowered and active.

In practice it appears that the new systems make possible significant financial savings and a potential expansion of family income over time, and a certain easing of living conditions, mainly of the tough working conditions of the women. The new electricity enables a connection – via television, radio, telephone, and possibly even computers in the future – to information, to friends, and to entertainment. All of this comes from clean energy, without pollution, dependent directly on renewable sources – sun and wind rather than on the power grid or the authorities. In this sense it is a system that gives its users autonomy.<sup>15</sup> For people who experience daily dependence on the forces of nature for water, sunlight, pasture, and indeed survival, for those who try desperately to adapt their life to drought, the burning sun and the thirsty land, a system that takes advantage of burning sun and blowing wind, provides a new dimension to their relations with nature – one that is a bit more balanced, empowered and active.<sup>16</sup>



## Introduction

## Part I

## Part II

## Part III

## Economic and social survival

## Lower costs, improved production and better prices

Prior to the installation of the renewable energy systems, some of the families used generators for about two hours in the evenings. They paid between 300 NIS to 400 NIS a month for diesel fuel that, apart from being expensive beyond their means, was highly polluting. When a generator was operating, they could extend the daytime by two hours. But on most days these were additional work hours for the women, who used the generator to do laundry or to use an electric butter churn. The men used electrically powered tools as required, charged the batteries on their mobile phones and watched television. In most communities, though, there was no generator<sup>17</sup> and the day ended when darkness fell. People used oil lamps or various kinds of portable kerosene lamps, which required the use of expensive, polluting and dangerous fuel. After the new system was installed, the use of generators was stopped completely, saving on fuel and maintenance costs.

The process of butter and cheese production was improved and its efficiency increased, thanks to the use of the electric butter churn and the availability of refrigerated cold water (which is important in separating the cream from the milk). Before the use of the electric butter churns, two women were required for separating the butterfat from the milk by hand, first letting the milk stand overnight, then putting it into a sheepskin and rolling it from side to side without stopping for two hours. With the electric butter churn, this task is completed in an hour, by one woman, who can supervise it while doing other tasks. Moreover, the use of cold water improves the efficiency of the separation process and causes white cheese to be whiter. This kind of cheese is considered better quality and is sold at higher prices. In the community where the electric churn is now in use for the second year, I learned that women achieved a 15% increase in output compared to the year before the system was installed, and the men sold the cheeses for 50% more than formerly. While not making the family rich, these changes could definitely become the critical factor that enables the family to survive and go on living where they are.

<sup>17</sup> About 8 years ago a humanitarian organization had donated a generator to each community in the misfera. All of them broke down over the years, and only few families could afford repairing them.



> Up left photo / Hajeh Nuzha of Sha'eb el Buttum pouring milk into the electric butter churn. Women achieve 15% increase in output, and the men sell the cheeses for 50% more than formerly. Photo: Noam Dotan, July 2012.

> Up right photo / A woman of the Abu-Malesh family in Wadi el Rahim using the traditional butter-making sheepskin. Photo: Hagit Keysar, April 2009.

> Down right photo / Hajeh Nuzha of Sha'eb el Buttum checking her stock of Leban cheese. Photo: Noam Dotan, March 2012.



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## Introduction

## Part I

## Women's work

The most palpable immediate impact of electrification is on the work of the women.

"Trayechna" – we are relieved– is what the women say about their lives since the advent of electricity. Now they are able to smile, to devote a little time to the smaller children and still work all day, but finish their tasks when darkness comes. The electrical tools that replace manual labor make the work significantly easier in the following ways:

- The electric churn that separates the butterfat from the milk turns exhausting manual labor into a supervision task that permits simultaneous accomplishment of other tasks and does the job of separating the milk in half the time it takes two women to do it by hand.
- The refrigerator permits storage of perishable foods and more efficient planning of family meals.
- The simple laundry machine, using water heated on a wood fire, saves the work of washing clothes by hand. After the machine's wash phase, the women still do the rinsing by hand using a large plastic tub. The rinse water is used to irrigate small herb gardens in which they grow mint, sage, zaatar (hyssop) and sometimes radishes or red peppers. The time savings is described by the women as a one hundred percent profit. Doing laundry, a job that formerly took two hours, is done in only one hour; and the machine has enough capacity, if there are no small children, to permit laundering on alternate days instead of daily.

Alongside the time saved, the women also experience a significant easing of their constant physical burden. Once entirely bound to the daily work routine, the women now feel a certain space opening up – allowing for a little rest during the work day and, notably, some time to spend with the smaller children, who get more attention now than formerly. The little ones are calmer, and the family is more relaxed.

Living conditions in the *khirbeh* make cleaning a never-ending project. Women attribute great importance to the daily routines that provide personal cleanliness, clean clothes and a clean household space. Finishing these routines is how they mark the end of the working day and create an atmosphere of perpetual renewal in their lives. The use of electrical appliances undoubtedly makes a significant contribution in this sense.



"Trayechna" – we are relieved– is what the women say about their lives since the advent of electricity. Now they are able to smile, to devote a little time to the smaller children and still work all day, but finish their tasks when darkness comes.

> Up photo / Women of the Al-Najar family in Sha'eb el Buttom using an electric washing machine. Laundry now takes one hour instead of two and can be done every other day. The time savings is described by the women as a one hundred percent profit. Photo: Tomer Appelbaum, January 2012.

> Down photo / Rasmyia holding a cold water bottle in her cave in Tuba. Cold water improves the efficiency of cheese production and results in higher quality cheese. Photo: Tomer Appelbaum, July 2012.



## Introduction

### Part I

#### Education and information

The connection with the outside world made possible by television, radio and mobile phones connects the *khirbeh* residents to the broader society and exposes them to information and to learning opportunities that would not exist for them without electricity. Computer use, which has begun in some of the communities, opens new horizons for learning using attractive educational programs, even for those young people who chose or were forced to leave school and work in the *khirbeh*. With the future possibility of Internet connection, new options will emerge for distance learning and access to new realms of knowledge, consonant with the time available and individual desire to learn. In one of the communities a young shepherd who was taken out of school at age 12, was able with the help of an international organization to take a course in first aid. He was told that if he had a computer, he could work for the organization afterwards, which would require him to continue studying from CDs. The boy (16), who had formerly not wanted to hear about school, changed his mind and became enthusiastic. Now he says he will ask his father for help with the herd so that he can remain in the community and earn some money while acquiring knowledge in a field everyone needs and few master. Before the installation of the renewable energy system, such a job was out of reach for the boy.

### Part III

The connection with the outside world made possible by television, radio and mobile phones connects the *khirbeh* residents to the broader society and exposes them to information and to learning opportunities that would not exist for them without electricity.

<sup>18</sup> Several times I was asked, following commercials on Egyptian television, to keep an eye out at pharmacies for patches that reduce fatigue and boost energy, but unfortunately this wonderful product has not yet reached Israel.

## Family and community life

#### “Quality time” with the family

Thanks to electricity, the day is longer, generally lasting until 10:00 or 11:00 at night. Evening life now includes social content – the entire family gathers in the room/tent where the television is located, and together they watch their favorite series: Bedouin soap operas from Saudi Arabia and Jordan, portraying sheep growers -- their customs, loves and passions, wars and celebrations. The sociocultural norms and lifestyles resemble those of the people watching. The heroes, male and female, become the topic of conversation, their accomplishments and failures provide a kind of framework for relating to people’s own lives here at home. Between one series and another, people watch Egyptian, Turkish and sometimes Indian films. Occasionally they listen to the news and see advertising, another way to learn about things in nearby countries, things that perhaps they themselves can aspire to have or to accomplish.<sup>18</sup>

The women do not have to work in the evenings. They concentrate all their work during the daytime and approach their evenings as the men do, at leisure. Some use the electric light to embroider while the television is on, some chat and occasionally comment on what they are seeing on TV and a short conversation ensues within the family. The ambience is relaxed. People talk about any special tasks for the next day, and disperse to bed.

In a society in which division of labor, roles and spaces is clear and rigid, the common space created when watching television in the evenings is a unique event. It is one of the rare moments in which everybody is free, all tasks have been completed, and children and adults alike gather in an informal and intimate atmosphere. Although the usual hierarchy is clearly present and only one person controls the TV remote -- still, as the family relates to life on the screen, which resembles their own in many ways, the door opens for a conversation about their own life. Sometimes the conversation stresses obligatory norms, that which must be, sometimes it points to possibilities and prospects of that which might be or could be. There is a lot of humor, laughs and giggling and sometime an undertone of criticism too. Most importantly, a new space opens up, one that encourages imagination, dreams, and aspirations.

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## Introduction

### Part I

#### A safe space

Having lighting in the family space is convenient for going to the toilet when it is dark out, connecting the various “rooms” of the domestic space, lighting the space that leads to the sheep, and affording a sense of a safe space that is accessible and connected: “The smaller children can go to their grandmother now even when it is dark outside, and it gets dark now by four o’clock. Before there was electricity, they could not go to see her because our cave is there at the end, and mother’s tent is at the entrance. Apart from that, because there are no lights anywhere in the area, the light we have is much brighter and much stronger, and it gives everyone a sense of security.”

The sense of security also comes from the residents’ understanding that the animals that prey on sheep will stay away from a lit place and not dare to approach. This understanding enables the shepherd to sleep more easily at night, and the people sleeping in open tents can feel safer, too. When I was a guest of the families, there was always a small light left on at night so I could feel safe.

The illuminated area delineates the boundaries of the family space at night. The darkness beyond it is what separates one family from the next, creating a kind of fence made of light and darkness.

“The smaller children can go to their grandmother now even when it is dark outside, and it gets dark now by four o’clock. Before there was electricity, they could not go to see her because our cave is there at the end, and mother’s tent is at the entrance. Apart from that, because there are no lights anywhere in the area, the light we have is much brighter and much stronger, and it gives everyone a sense of security.”

> Aysha of Tuba at a moment of joy. Women now feel more relaxed and relieved from the immense pressure of work. Photo: Eduardo Soteras, March 2010.



Women feel more in charge of the situation and this feeling of empowerment makes them stronger and happier.

#### Status of women

The woman who now feels more relaxed and relieved from the immense pressure of work, is also empowered in other significant ways. For much of the day, the man of the family is herding the sheep in the pastures, sometimes for hours and sometimes for days on end. The woman or women are the “masters” of the house during those time periods. In the past, as already noted, they did their work without the benefit of electricity, especially during those hours. Nowadays when many of the women are cleaning, they keep the radio on and listen to music, to readings from the Qur’an or to various kinds of morning programs. They do not need permission, no one is supervising them, the hand holding the TV remote at night is absent during the day and they can choose for themselves. Thus they are exposed to different information and ideas and they experience a sense of independence and a greater degree of autonomy.

Moreover, a woman rarely moves around outside the domestic space without her husband, or her father, except for walking to a neighbor woman’s home for some specific reason. A young woman still has friends from school and relatives in various places. The free use of mobile phones enables her to have virtual mobility and, mainly, a connection with other women. They rarely speak on the telephone on their own initiative, but instead send text messages to one another. Sometimes the women would phone a female relative who is better off financially and then hang up, so that the relative will return the call. Women feel more in charge of the situation and this feeling of empowerment makes them stronger and happier.



## Introduction

## Part I

## Part II

## Part III

## Young people and old people

In Yatta, which is connected to the electric grid, live some of the offspring and other relatives of the *Misfera* residents. All of the latter have visited Yatta or stayed there for varying periods of time. Returning home after visits to Yatta is particularly hard on the young people, who want to let off steam after work. Traditional Palestinian society does not permit friendships between the sexes prior to marriage and young people's leisure time is spent in front of the television, or with computers – playing computer games or surfing the Internet, sitting in cafes in the city or wandering around from place to place in the way that young people do. Until recently, none of that was possible in the *Misfera*. Now, with electricity, life there begins to look different; the television is on every evening; in some places there are already computers; lighting is possible throughout the family space and, for the young people, the lure of the city, even if it exists, is less intense. Young men come to visit and stay for the weekend in their parents' home in the *khirbeh*, and many more of the young people who try their luck at working in Israel spend longer periods at home when there is no work, and do not immediately return to Yatta. Young families with infants come for longer periods to stay with their parents. The absolute contrast between Yatta and the *khirbeh* has diminished; the huge gap has narrowed. There is something to do at the *khirbeh* apart from working all the time.

> Head of the Dbabsah family holding his grandson in Esfai. With electricity, the elderly can remain where they grew up and feel most at home. Photo: Eduardo Soteras, January 2010.



> Youssef and his sister watch television in their cave in Tuba. Television provides a connection to the wider society and a means for acquiring information and knowledge. Photo: Tomer Appelbaum, July 2012.

Living conditions for the old people at the hamlet have also improved. Lighting in the toilets and in the space leading to them permits more secure access at night; medicine can be stored in the refrigerator; the television can be turned on in the afternoons; and thus an old grandfather, so long as he is not in need of immediate medical care, can remain right where he grew up and where he feels at home. Some of the old people now divide their time between the family at the *khirbeh* and the family in Yatta and everyone is much more satisfied.



## Introduction

### Part I

#### The community

The last and perhaps most interesting aspect of electrification is the impact on the community as such. As mentioned in the foregoing overview, at the *khirbeh* the families live next to one another, as neighbors. But cooperation between them is minimal. Most of it takes place within the immediate family and between those who share ownership of a herd.

With the installation of the electricity system, things change. The system belongs to the community as a whole. One utility room is constructed for it, and that room houses all the equipment that transforms and “translates” the energy of wind and sun into electricity. The cables from that room connect to the residents’ dwellings and in so doing, outline the boundaries of the community. Guarding that room and maintaining the batteries and equipment is in everyone’s joint interest. The boundaries of the electric system now define the community that comes into being through the process of laying the cables. The ‘community,’ in that sense, continues to be nourished by the activity of cooperation and shared decision making regarding the electricity. Hence, the installation process builds the community, both literally and symbolically, by creating new patterns of cooperation.

The process begins with the first meeting at which a group of family representatives gathers to address the possibility of the installation of electricity, and is solidified by the need to reach a decision together that will have long term implications in many areas of life. It is true that people also gather when the Red Cross distributes tents, and they also tell one another about that. But in that instance, each family receives a tent and that’s the end of it. Here the matter is just getting started. The utility room for the electricity is located in the most suitable place from a topographical standpoint and the cables are laid from there to each family. Stretching cables for one family may cover just a few meters, but for others it may reach hundreds of meters and require physical labor of people beyond the specific family or hamoula. All the families are required to lend a hand and to participate in laying the cables; the men find themselves cooperating and investing time and work energy in laying cables for a distant neighbor, for the benefit of the project as a whole.

The system creates a new category of electricity. This is not electricity like in Yatta or like that produced by generators. The system offers different limitations and possibilities, it is unique, and it requires a process of learning, acquaintance, coordination and cooperation. On days with no sunshine and no wind, the families must limit their electricity consumption. If a few families ignore this limitation, the entire system is liable to be damaged. Damage to the system affects everyone; it damages the community.

To paraphrase the recent words of an elderly resident: the feeling is that to demolish the system now, and once again prevent access to electricity for these people, would be like giving water to someone desperately thirsty and then, after he has taken half a sip, emptying the cup right in front of him.

Men who used to meet infrequently find themselves sitting and trying to clarify together, among themselves, the implications of the advent of the system and especially of its maintenance over time – because when the installation process is complete, the authority over and the ownership of the electricity system is handed off to the community. The electricity, however, is not supplied for free. For service, repairs and maintenance of the system, Comet-ME charges a fee based on the cost of electricity consumption in Yatta, with one difference: payments are not transferred to Comet-ME but rather to a bank account opened for the community, and all the money that accumulates there is meant to pay for new batteries when the time comes, to underwrite additional users, etc. It is a kind of treasury for the ‘electricity community’ which in the initial phase is administered by Comet-ME.

Lately (winter and spring 2012), the ‘electricity community’ has been unified by shared anxiety due to demolition orders issued for the utility rooms and the solar panels in 10 different communities. Conversations today revolve around a shared concern that the demolitions might be carried out. Instead of planning for the future, the people are currently unified by fear. To paraphrase the recent words of an elderly resident:<sup>19</sup> the feeling is that to demolish the system now, and once again prevent access to electricity for these people, would be like giving water to someone desperately thirsty and then, after he has taken half a sip, emptying the cup right in front of him.

<sup>19</sup> When asked about the effect of electricity on their life he answered: “Like water for the thirsty.” I have chosen that phrase to headline this report.



> Up photo / Comet's team repairs the turbine in Sha'eb el Buttom with the help of local residents. Comet's work is long-term, involving maintenance and regular visits to the communities long after installation. Photo: Aya Shoshan, April 2011.

> Down photo / Residents of Tuba carry the turbine's tower during installation. All the families are required to lend a hand and to participate. The men find themselves cooperating and investing time and work energy for the benefit of the project as a whole. Photo: Eduardo Soteras, February 2010.



> Up photo / Mounting solar panels in Tuba with the help of young electricians from Hebron and local residents. Photo: Eduardo Soteras, January 2010.

> Down photo / Elad of Comet-ME and a team of young electricians from Hebron during installation in Maghayir al Abeed. Photo: Eduardo Soteras, January 2010.



The boundaries of the electric system now define the community that comes into being through the process of laying the cables. The 'community,' in that sense, continues to be nourished by the activity of cooperation and shared decision making regarding the electricity. Hence, the installation process builds the community, both literally and symbolically, by creating new patterns of cooperation.





## Introduction

## Part I

## Part II

## Part III

## Comet-ME and the community



> Planning the installation process with members of the community in Maghayir al Abeed. The community continues to be nourished by cooperation and shared decision making. Photo: Eduardo Soteras, February 2010.

This section addresses the nature of the relationships, images and impressions that have developed between the people of Comet-ME and one of the Yatta *Misfera* communities. The dynamic I present here was characteristic of that one specific community, but is evidently instructive about other communities, too.

Comet-ME is a nonprofit company. Its two founders are Israeli Jews, professionals in renewable energy, peace activists who decided to channel their activism into the realm in which they can contribute their professional know-how and promote changes on the practical level. The person working with them in the field is an Israeli Jew, a key peace activist in the south Hebron hills, whose reputation precedes him among the Palestinian communities there. Working with them is a Palestinian electrical engineer from Ramallah and two electricians from Hebron who received special training from Comet-ME. The composition of the staff is unique among organizations working in the south Hebron hills.

Comet-ME's activity is long term. One can speak of four stages in the work process: the first is the initial getting-acquainted phase, presenting the project and explaining it to the residents, and assessing their needs. The second phase is the system installation, which takes several months and involves a great many meetings and a lot of physical labor – such as laying the cables to residents' homes, and setting up the turbines; this is labor in which the residents are called on to participate. The third phase is the mutual acclimatization phase – of the community to the system, and the system to the location. During this period there are adaptations, repairs and changes made, to meet the needs of the residents and to adjust to the realities on the ground. The fourth stage is that of routine maintenance, which in fact is ongoing; the Comet-ME maintenance crew will visit the communities periodically to make repairs and collect regular payments for electricity consumption as described earlier.

The fieldwork on which this report is based began during the second phase of Comet-ME's work in the specific community I studied, while cables were being laid to the residents' homes. This is an advanced stage in the getting-acquainted process that Comet-ME's team initiates with the community. Hence I cannot address the manner of Comet-ME's entry into the community and the preliminary stages of acquaintance.

The first stages of my work were typified by expressions of curiosity and suspicion regarding Comet-ME: "Who is its director?" men in the community asked me, and "How much do the Comet-ME managers earn? Does the company work with the government? Who pays their salaries?" Evidently it was unclear to people whether this is an organization of volunteers, like the peace organizations with which they are already familiar, or whether it is like an aid organization, whose staff members are believed to receive good salaries, especially the executives. Or maybe, they thought, it is like the electric company, an organization that is actually connected with the government and would install an electric power system like in Yatta and come back to fix breakdowns.



> Meal break during installation in Tuba. Building a foundation of trust. Photo: Eduardo Soteras, January 2010.



## Introduction

### Part I

### Part II

### Part III

The relations between Comet-ME and the community underwent dramatic changes when, during the installation of one of the turbines, representatives of the Civil Administration showed up, stopped the work on the pretext that there was no building permit given to the turbine, and called the police, who came and arrested two of Comet-ME's Jewish managers. It was a shock to both Comet-ME and the residents. Comet-ME had worked openly in the *Misfera* for two years without any interference from the Civil Administration, the settlers or the Israeli army. The wind turbines, which are tall and visible from a distance, were erected; solar panels were set up; and everything went along routinely. Comet-ME's people focused on the professional aspect of their work, trying to improve the systems and make them as efficient as possible so that they would work well for the long term. Nor did the residents worry about interference by the Civil Administration; they were busy with their everyday routines, enjoying the electricity that had just been connected (at that point the solar panels had been installed and were operative).

In light of the developments, a decision was made to change the location of the turbine. First, however, the residents had to decide whether they still wanted to erect the turbine. Once their consent was given, they were consulted about an alternative location, a new installation date and its timing. The aim was to erect the turbine with no interference, in other words, kind of secretly. Doubts as to date and timing were resolved by relying on local, rather than professional knowledge. It was clear to everyone that the locals, as owners of the land and bearers of the occupation, were the ones with the answers this time. A partnership evolved, this time on a somewhat more symmetrical and equal basis. Erection of the turbine began at dusk and continued well after darkness, facilitated by flashlights and moonlight, in a scenario that reminded the Jews on the team of the old "tower and stockade" stories<sup>20</sup> from the early 20th century. In the early 21st century, however, in the *Misfera* of Yatta, the Palestinian women served warm goat's milk along with gallons of hot tea, and the men took an active part in the construction work, while the older folks sat in a hospitality tent, gave instructions and provided commentary; the children were posted as lookouts to provide advance warning of any uninvited guests. Everybody took part.

<sup>20</sup> During the 1930s, under the British Mandate in Palestine, in order to "create facts on the ground," new Jewish settlements were sometimes established overnight after all the materials required had been prepared in advance. The strategy relied on Ottoman law, which forbade the destruction of a building that already had a roof. Thus the construction had to be done quickly, in the dead of night.



> Civil Administration interrupts wind turbine installation in Simre. The visible vulnerability of Comet-ME's managers and their continued commitment opened the way for solidarity and partnership. Photo: Tomer Appelbaum, November 2011.

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## Introduction

### Part I

### Part II

### Part III

The set-up project was completed efficiently and quickly, by indeed the community. The cooperation experienced and exercised in the erection of the turbine, 'created' and reified the community, and Comet-ME, at that point in time, was also a part of it.

The interference by the Civil Administration and the sense that installation of the turbine was under threat, seemed to wake everyone up. Once a joint decision of Comet-ME and the men in the *khirbeh* had been reached that, despite the risks involved, the turbine would indeed be erected, residents who hitherto had kept their distance from the project seemed to feel – perhaps for the first time – that they were involved, that they were responsible, that they were partners in the project. They were afraid, but they wanted the wind turbine. They so badly needed the electric power that would enable them to handle the intensive milking period ahead more efficiently, that they were ready to go ahead. Having already experienced some relief, they could not contemplate giving it up. They were afraid, but they felt they were not alone this time -- and that made a difference.

This feeling was reinforced as the situation deteriorated and demolition orders were issued against the solar panels and utility rooms in ten communities. Faced by the challenges that the political reality was posing, Comet-ME's people resumed the role of peace activists. Their decision to erect the turbine despite the evident change of policy, and their subsequent decision to undertake an organized campaign of opposition to the demolition orders, meant that – while maintaining their professional identity and their commitment to the energy systems -- their commitment to the residents' struggle for their right to electric power prevailed.

It seems that, above all, the visible vulnerability of Comet-ME's managers and their continued commitment in the face of it opened the way for solidarity and a partnership on a more equal basis. Comet-ME's managers, like any Israeli (the author included), and in most senses any American or European who comes to the south Hebron hills, is in a position of power relative to the residents. The Israeli comes from a place of capability, possibility, mobility, a different standard of living, a position of knowledge and resources – he represents the ruler, the one in control, even if in his own society he lacks political power and represents a small minority. These power relations are never really dismantled, but the sharpness of the contrast in power is greatly decreased by, among other things, the demonstration of even a relative vulnerability of the stronger party in relation to the forces that oppress the Palestinian residents. It seems that the contrast is also weakened somewhat by the repeated expression of sincere concern, by deep empathy and by sustained periods of time spent in one another's company.

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## So what is Comet-ME?

An electric company? An aid or development organization? An activist peace N.G.O.?

Comet-ME appears to be a combination of all three. This is an unconventional mix, whose parts are not always congruent. This makes Comet-ME difficult to categorize and may sometimes cause suspicion or confusion and provoke contradictory responses. Various organizations that are active in the immediate environment of these communities belong only to one of the three categories; the residents, who are familiar with the organizations, know what to expect of them and how to define their relationship with them. The encounter with Comet-ME does not fit the familiar categories and yet in some way includes all of them.

Functioning as an electric utility company evokes a sense of alienation that characterizes the relations between a service provider and a customer, since the service provider views itself as committed first and foremost to the integrity of the system and its proper functioning. Functioning as an aid organization sends a patronizing message in a relationship of haves and have-nots, between someone who gives and someone who receives. Operating as a peace organization sends a message of solidarity, commitment and acceptance. These relations are the ones closest to equality – although here, too, there is a disparity and an asymmetry between the Jewish activists and the Palestinian residents.

I would like to suggest that all three models of relations exist between Comet-ME and the residents. There are internal contradictions, yet it seems to me that in a gradual and complex process, everyone involved is learning to live with them more peacefully.

In the community where I stayed, the process of getting acquainted and building trust with Comet-ME included examining the different aspects of Comet-ME's identity as they were manifest each time in context. The process, the human and social composition of the organization's staff, and especially the events that highlighted unequivocally the contrast between Comet-ME and Israel's Civil Administration and army, all contributed to building a foundation of trust that facilitated the expression of all three aspects of the organization's nature.

As Comet-ME's people become more adept at alternating smoothly and efficiently between these identities, with greater weight given to solidarity actions, both Comet-ME and the residents will be able to better contain the aspects not to their taste – those related to the identity and expectations of an electric power company or an aid organization. This is due to the fact

that both Comet-ME's staff and the Palestinian residents regard and define the organization's members first and foremost as people working for peace and for Palestinian rights to basic infrastructure and to a decent existence on their land.



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> Erecting the wind turbine in Tuba. Photo: Eduardo Soteras, March 2010.

## Conclusion

It is strange to be explaining in the 21st century the crucial importance of electricity for human beings. For anyone who was born into a reality in which flipping a switch results in electricity flowing automatically, it is difficult to imagine a complete life – work, family life, study, and ongoing daily routines – without light, without electrical appliances that make housework and food storage easier and without information technology and entertainment that come into the living room via the radio, the television, and the computer.

The lives of the residents in the hamlets in Massafer Yatta have, until recently, been conducted not just without electricity, but also, as explained, without any basic infrastructure. Some of these communities have recently obtained renewable energy systems supplying electricity to their tents and their family spaces.

These communities of herders and farmers in a semi-arid region, in a world undergoing desertification, need spatial mobility. Free movement in the open has long been denied to the *Misfera* residents by the Israeli regime, which is responsible for their welfare. One year of drought follows another and yet they cling to their way of life; in fact, they have no real alternative, and against all odds they are succeeding in surviving under the most difficult of physical conditions.

Electricity will not solve their water problems or many other problems not enumerated here that confront them. Electricity, however, enables a certain easing of the struggle for survival, increases the sense of security and empowers the residents, both in their struggle with the forces of nature and with those who deny them the option of connecting to the power grid. Beyond that, electricity has helped to enrich the sense of home, of family and of community even under harsh conditions. Hence families of meager means, living in a socially and geographically marginal area of Palestinian society, have experienced a significant sense of relief and autonomy thanks to the introduction of electricity.

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In a context characterized by uncertainty, a hostile regime and an environment that is challenging in multiple ways, a project that brings some degree of autonomy by supplying non-polluting renewable energy is a great blessing to the environment and to the community alike. Indeed, it opens spaces hitherto beyond reach and enlightens them with hope.



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