

Negev: The Oasis in the Desert

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Outline

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The instability of Israel and the Negev Desert is intertwined; they have parallel difficulties. Important places that were left dormant for years are now coming to life through antiquated processes. Both are finally realizing their importance and necessity because of revived irrigation methods. The desert of Negev can be developed and useful, but much blood, sweat and tears must fall for this to happen.

The history of the area in Israel called Negev Desert has gone through a transformation over the centuries. Its past was never that of a dry desert, but rather lush lands and conducive crops. Imagine a land so beautiful that God described it to Moses as “a land flowing with milk and honey” (Exodus 3:18, KJV). Negev was a coveted place because of its ability to produce fruits and vegetables in abundance and also to sustain livestock. An article about Negev in the *Encyclopedia Britannica* says during Biblical times, the area was pastoral and that its grain helped to sustain the Roman Empire (“Negev,” 2014). This southern area in the land of Israel is situated between Egypt on the west and Jordan and Saudi Arabia on the east. Negev connected these prominent countries, hence making it a vital trade route. The down side was that more people and animals were using and abusing this once-beautiful countryside. Armies used these same routes to invade Israel and surrounding countries, even more damaging the fragile ecosystem. Again, the Britannica states, “With the conquest of Palestine by the Arabs in the 7th century, this area has been a wasteland for over 1,200 years” (“Negev,” 2014). Like anything else in life, once neglect and decay start, it is difficult to stop them. So years and years of disregard and disrepair triggered the downward spiraling effects of this once productive place. Negev is now a wasteland. In 1948, Israel became a state, and Jews began moving back to their motherland. Negev is part of the territory that Israel received, but many believe it is

worthless. One person who thought this very idea was Yasser Arafat. During peace talks in 2001, Israel offered Mr. Arafat the area of Negev. He turns down the offer, saying Negev was "a place of death...Nothing could grow there" (qtd. in Jaffe, 2014). Not everyone, however, felt that way about this desert. Ever since its inception as a state, the first Prime Minister David Ben-Gurion believed this area a necessity if Israel was to survive ("The Negev Desert," 2016). Because Negev occupies almost 60% of the land mass of Israel, it is imperative that this once-fertile area be restored to its former state. If Israel is going to try to be a self-supporting state, it will have to invest time and resources.

The importance of developing Negev cannot be underestimated. The Jewish people and the land of Israel are no strangers to conflict. This part of the Middle East seems to never have rest. There have been altercations such as the Suez Canal crisis, Six Day War, scud missiles and terrorism. Being innovative like they are, Israel used its agricultural knowledge and desert development skills to bring together 36 countries from all over the world in efforts to foster stronger diplomatic relations (Grossman, 2016). Just as Solomon used his intellect to strengthen diplomatic ties with the Queen of Sheba, Israel used its know-how to strengthen her friendship with many other nations. Israel's proactive steps in reaching out to its neighbors in an attempt to mend or strengthen relationships will prove valuable in the future.

Another important reason to develop the desert area of Negev is because of its size. As stated earlier, Negev takes up 60% of Israel's land mass. Development, albeit slow, has been taking place since Israel's inception. Back in 1964, Israel finished a water-pumping system that supplies Negev with water from the Jordan River ("Israel Profile - Timeline," 2016). Instead of being a dormant desert, Israel has progressively built up an infrastructure. A nuclear power

plant was built years ago to supply electrical power throughout the country. Recently added were the Israeli Defense Force, a prominent university, cyber security unit, and then \$2.5 million on a synagogue and \$4 million for a medical center (Jaffe, 2014). These and other additions, such as housing and apartments for families, are contributing in making the vast area of Negev a livable region.

The final reason to develop Negev is the obvious: food. Israel has a population of 8.2 million people ("Israel Population," 2016). That is a lot of mouths to feed. To spark interest in revitalizing the land, teaching people how to farm in arid temperatures, and populating an unpopulated place, the Jewish National Fund started a project called the Young Farmers (Jaffe, 2014.) There has been success especially in the Negev city called Avdat. They are using a technique called runoff farming, which uses a flash flood tiered system and has produced apricots, eucalyptus, olives, acacias, peaches, pistachios and pomegranates (Shafer, 1984, pp. 12-18). The success stories are not numerous; the results are not instantaneous. However, if continued, there will be change in the desert's fragile ecosystem, resulting in a more productive desert.

There have been two primary methods in the development of agricultural farming in the desert. The first method is not new but actually over 3,000 years old and is used by the Bedouin tribes today. This method is called runoff because the ground is terraced so that flood waters are released and guided from the top terrace then run down the steps to the terraces below (Shafer, 1984, p. 14). This is the area previously mentioned as Avdat and is referred to as the Nabataean floodwater farms. In a floodwater or runoff system, the water is controlled to provide maximum irrigation and stimulate deep root growth. In order for delicate seeds to

grow, they must have water. "Soil moisture is a critical factor in desert soils. The condition of the soil surface and the infiltration of water are strongly influenced by organisms living in the soil" (Bainbridge, p. 20). In a desert situation, water is vitally important to any living thing—whether plant, animal or human. If not controlled, this same life-giving force can be a force for destruction. One of the worst conditions in farming is called erosion or the washing away of soil and or seed. Mr. Bainbridge says anyone trying to restore an arid area for agriculture should focus on one of the beginning processes of stopping erosion (Bainbridge, 2007, p. 144). Erosion and lack of water are corrected by using the floodwater method.

The next method used in the Negev is that of loess soil. The water-retaining areas use loess soil to trap the water that will later be used to irrigate the produce area. Loess soil is very interesting in how it works. When the flood waters pass over the loess soil, the soil then swells, hardens, then traps water underneath the hardened layer. The excess water passes over the crusty soil to the terrace below, soaking it. This trapped water in the loess soil evaporates at an almost nonexistent rate and can supply enough water for a year's worth of crops ("1980: Farming the Negev Desert," 2009). Loess has been found throughout the deserts of the world and is very useful in growth of plants in hot and almost waterless places. Loess soil must be formed in water catchment areas, but can produce tremendous growth in desert agriculture.

Hard work and much investment on Israel's part have finally resulted in a different desert than anyone could have ever imagined. Even with newer technological methods such as hydroponics, Israel is using a 3,000 year-old method to farm the desert. The runoff and loess methods have produced salad from sand. Their more than 60 years of planning and hard work has paid off. Israel might just become self-sufficient and a leader in desert agriculture.

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