

# **Know without Knowing: Lessons from the Rural Jordanian Women about Climate Change**

**By Amal Thabet Almalkawi**

The weather outside is arid and hot during my nightly walk. I am getting late, and I walk back my home, which looms at the top of the hill in the far north of Jordan, Malka, in one of the villages of Irbid. It is surrounded by hugging mountains as far as the eyesight can see. It is the last day of Spring, and there isn't a chance of rainfall! I look up at the dark night sky, filled with countless glowing stars. I hear my footprints in the dry soil and grass. There is no green cover land this Spring due to abnormally low rainfall. My footsteps are getting faster, and I continue my walk on the rural road, passing small houses belonging to my relatives. Suddenly, I hear a warm voice calling my name. "Amal, come in". She is my Uncle's wife, and she is over 80 years old. She smiles at me and invites me to have some tea with her. "Hello, Aunt. It's my pleasure," I answer. I sit on the chair in the front yard of the house, which faces southwest and is surrounded by a small fence and big pomegranate and apple trees close to the house, as well as olive trees farther away. The house is built from clay and stone, with walls over 50 cm thick. The main door is located in the middle of the elevation, flanked by two narrow-long windows on the right and a balcony with a glazed façade on the left with small vents in the upper part of the wall, featuring pleasing asymmetrical proportions. I drink a cup of tea with peppermint and talk with my Uncle's wife. During that, she stands, picks some apples from the tree, goes to a big clay jar of water, used for cooling the drinking water, in the corner of the yard, fills a cup of water from the jar, bends down,

and washes the apples towards the corner that has a drain pipe which holds the water through a canal to a specific location under the lemon tree. I want to do that instead of her, but she insists on doing that with herself as a kind of hospitality. “Please, Adam, bring me a bottle of the grape leaves,” she asks her grandkid while I am leaving. “Where does that, my grandma?” After a while, he replies to her. “Well, I put them beside the bottles of the pickled olives” she answers him. “The bottles of the Cola, Adam, in the lower part of the pantry of the kitchen” she tries to give him a description of the bottles. I get the bottle as a gift and leaves after she gets a promise from me to visit her many times in the future.

I continue my walk back home, only the sound of my footsteps on the earth and my breath cutting through the calmness of this quiet night.

Meanwhile, I recall my first conference participation in my academic journey in Amman, Jordan, at the Global Conference on Renewables and Energy Efficiency for Desert Regions (GCREEDER), which aims to bring together researchers to discuss climate change and renewable energy. I’m not entirely sure what climate change means. Researchers and industry professionals from around the world discuss about climate change, energy consumption, carbon emissions, and the latest updates on renewable energy technologies. As a young architectural student, I feel a mix of excitement, curiosity, and drinking from a firehose at the same time. Each day of the conference adds another layer to my understanding of the meaning of climate change. I remember having a unique conversation with one of the experts. He talks to me about building envelope materials and their impact on energy efficiency and global warming. At the end of the conference, I start to realize that climate change is not just a scientific topic connected to professionals and experts. It’s about everyday life details around us.

Over time, these seeds of curiosity grow up. I continue my academic journey, I read, research, and explore the climate crisis. I learn that even the simplest actions rooted in awareness can become part of an effective solution. And I see myself not just as a researcher but as a member of a generation that should protect this planet for the next generation. This journey led me to get a research grant from UN-Habitat, the Knowledge and Scientific Network (KSN), and CeSPI. I am working on the SDG localization project with the Greater Irbid Municipality to inform decisions about policies related to clean and affordable energy in residential buildings in Irbid. For me, this is more than just theoretical research; it's a great chance to help my hometown to shape its future in terms of climate change.

Back to my Uncle's wife, she doesn't possess the same level of knowledge as we do as researchers. She doesn't know about climate change. She doesn't have a subject about climate change in her school. However, she builds the house using passive vernacular building materials and methods taking into account the sun, wind, and light. She plants apple and pomegranate trees close to the house to prevent excessive sun radiation in summer and create shade while letting them in winter to warm the house spaces as a vernacular solar passive action. She reuses the greywater to water the trees. She recycles the bottles in the kitchen to save resources and reduce energy and CO<sub>2</sub> emissions. She acts in many ways with the very essence of sustainability and resource efficiency, like any local woman in Jordan, not driven by her climate change awareness but by her responsibility and love for her family, grandchildren, and the Earth.

## **Abstract**

This article illustrates the powerful role of rural Jordanian women in environmental protection and sustainable development, working side by side with professional researchers, scientists, and industry experts to effectively address climate change. They possess unique traditional skills and

experience in terms of resource efficiency and conservation driven by indigenous-based intuition and necessity.