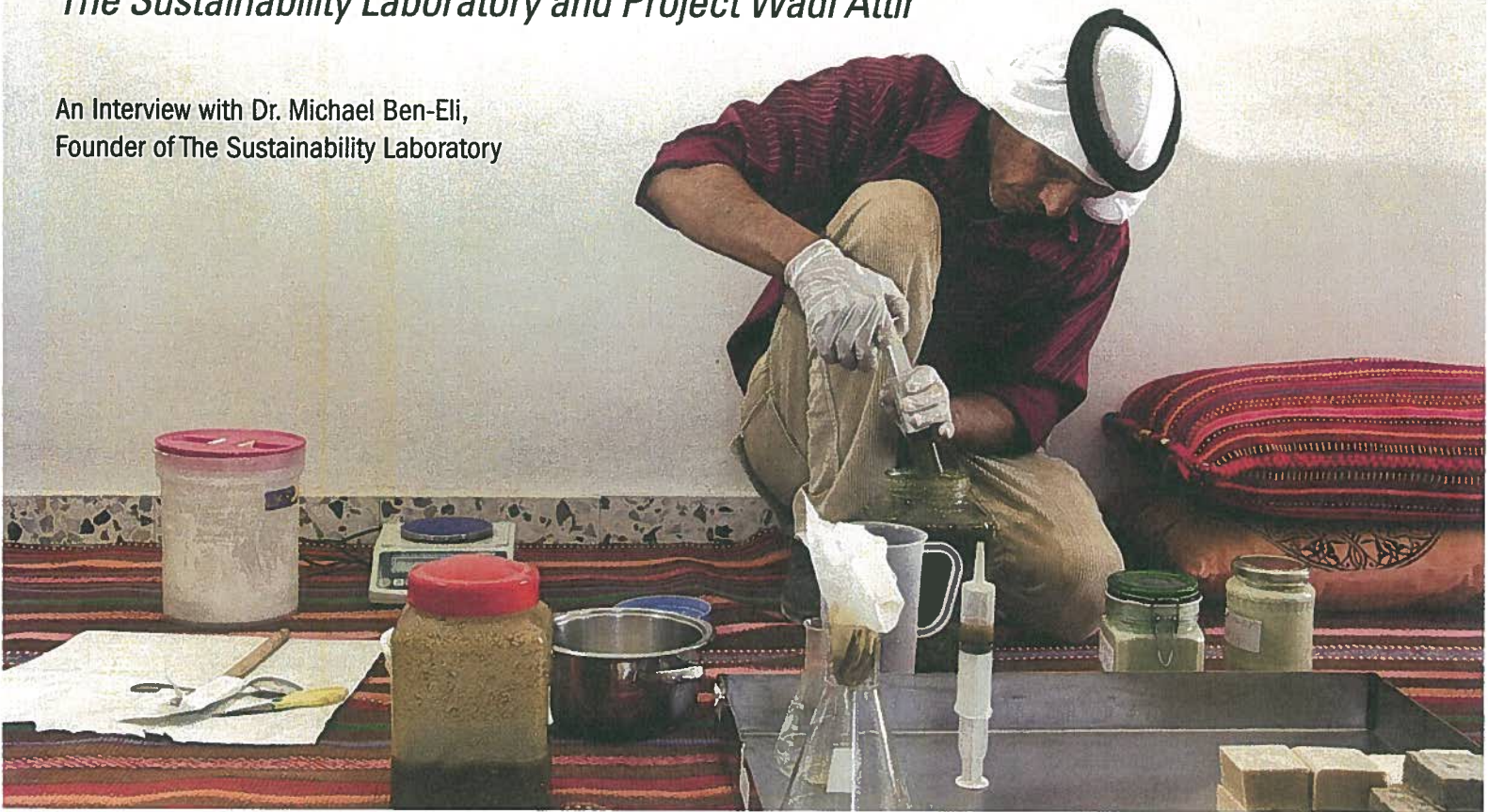


Holistic Thinking At Work:

The Sustainability Laboratory and Project Wadi Attir

An Interview with Dr. Michael Ben-Eli,
Founder of The Sustainability Laboratory



What inspired you to create The Sustainability Laboratory?

If you use the term sustainability, as it should be used, in the context of the whole planet, the integrity and health of its ecosystems and the enduring well-being of humanity, then the current trajectory of human affairs is evidently unsustainable. Many key components of the biosphere, as well as critical social and economic indicators, show deep signs of stress. In spite of growing awareness, the issues are relentless and unyielding and most existing mainstream economic and political entities are not evolving fast enough to meet the challenge. The list of issues is long. It includes Ozone depletion, climate change, loss of biodiversity and forest cover, the pressure on potable water resources, the loss of fertile soils, and more. It also includes a persistent, endemic failure of our social and economic institutions to address these issues effectively and in a timely manner. Working with multilateral organizations and the private sector on sustainable development-related projects, I became increasingly concerned about the huge gap between the rhetoric of sustainability and the actual progress on the ground. I began to study and later understand the limitation inherent to most of our large, existing institutions that are often, and rightly so, perhaps, risk averse. Their very structure rarely encourages breaking away from the prevailing frames of reference. The problem is that the issues facing us today are unprecedented in scope. These require a deep transformation in the ways we do things, in our view of the world and the values we hold dear. There is no textbook to guide us.

Only bold experimentation with new criteria, approaches and methods might help. Most institutional settings don't allow the freedom to experiment. I thought that an independent, agile entity free from similar structural limitations, and with the deliberate mandate to experiment, would be an interesting initiative—hence the idea of The Sustainability Laboratory. It was set up in order to develop and demonstrate breakthrough approaches to sustainability practices, expanding prospects and producing life-affirming impacts on people and eco-systems, in all parts of the world.

As a youngster, I was fortunate to study and work with great teachers. People like Buckminster Fuller, Gordon Pask and Stafford Beer, who were ahead of their time. Over the years I was able to synthesize what I learned from them into a potent framework that provides the conceptual basis for the work of The Lab. This framework integrates a rigorous definition of sustainability with a derived set of five core sustainability principles that are expressed in relation to five essential domains: The Material Domain; The Economic Domain; The Domain of Life; The Social Domain; and The Spiritual, or Values Domain. There are many valuable projects today, related to the sustainability agenda, but most focus on one specific issue, alternative energy, or water, for example. To make a real difference, however, the five domains and the related principles have to be integrated into a coherent whole. The Lab's design for Project Wadi Attir, demonstrates such a comprehensive integration.

How did you begin working with the Bedouin community and did you have a role model for Project Wadi Attir?

A few years ago, as I was contemplating the idea of The Lab, I had the chance to visit "Las Gaviotas," a wonderful development project in Northeast Colombia. The area, basically savannah land with hard grass, had resisted all sorts of cultivation. Paulo Lugari, a Colombian architect, had the idea of developing a rainforest there. It sounded absurd 25 years ago when he started, but he persisted and now the area supports a vast, full-grown rainforest where they've introduced plants with economic value that support the local economy in what is a very violent and impoverished region. Lugari is a profound system thinker and Las Gaviotas demonstrates a true holistic approach to development. I was inspired, and when the opportunity of doing something in the Negev emerged, I thought about "Gaviotas" in the desert. The opportunity came when I had the chance to visit the Blaustein Institutes for Desert Research, of the Ben Gurion University of the Negev, along with my colleague, Joshua Arnow. The place is a hotbed for world-class research in advanced technologies related to living in arid zones. During that trip I was exposed to the untenable conditions of the Bedouin community particularly in the so-called unrecognized villages. It did not seem right that full citizens in a country like Israel would live in desperate circumstances when there were such incredible technologies being developed nearby. I felt there was an opportunity to help. The Arnow family has been active with philanthropic support in the Bedouin community, so thinking about the possibility of a project there was natural. I sketched out a concept of what such an initiative could be—most who were exposed to it thought it was far-fetched—and with Joshua's encouragement and support, returned to the Negev to better assess possibilities. During that reconnaissance trip, I was introduced to Dr. Mohammed Alnabari, Mayor of Hura, a local Bedouin township of some 15,000 people. Mohammed represents a youthful, new, farsighted leadership in the Bedouin community. We hit it off immediately and decided to collaborate on a model project, which will showcase the integration of many development issues in one microcosm. The rest is now history.

What concretely does Project Wadi Attir aim to achieve?

The underlying purpose is to develop a model for sustainable agriculture in an arid zone, demonstrating a holistic application of the Lab's sustainability principles in an initiative that would benefit the local community and could be applied in other parts of the region, as well as in similar arid areas in other parts of the world. The project is designed to leverage Bedouin traditional values, experience and aspirations with modern day science and cutting-edge green technologies. In the farm, we shall be growing a mixed herd of goats and sheep organically for the production of a range of dairy products including Bedouin types of cheeses that don't require refrigeration. We shall also cultivate desert medicinal plants that Bedouins have been using as their healthcare system. This is all knowledge that is disappearing very quickly and that isn't completely known to science yet. We are working with a local Sheikh who has devoted his life to studying these wild plants and we have started the process of domesticating them and developing a line of health-related products for sale. We are also developing a women-led program to reintroduce nutritious, indigenous vegetables to common use in household gardens. Last, but not least, the project will house a visitors, training and education center that will promote eco-tourism, support outlying villages with technical training, and function as an important regional education facility. An integrated technology infrastructure will support the whole site, converting

waste into useful resources and reducing harmful emissions. This system includes advanced soil enhancement technology, solar energy and bio-gas production, the production of compost from organic waste, advanced irrigation management, and wastewater treatment and recycling.

On the social front, the focus has been on community participation and on encouraging the emergence of a group of entrepreneurs who will own their own businesses and be responsible for their own future. We felt that the project should not be associated with one particular tribe, but rather be open to people from all Bedouin towns and villages. We adopted a cooperative structure and we also encouraged women's full participation from the outset. It is rare to see combined teams of men and women working together in this community, and we hope that the Wadi Attir experience will inspire others.

What are your next steps?

Project Wadi Attir has been very time-consuming and implementing it correctly and fully will still pose several challenges. Ultimately, we envision the project as a learning center on many levels. While we introduced various new concepts to the group involved with the project, the Bedouin community has much to teach. An attitude towards plants, for example, that is different from the perspective of large-scale agro-industry. In the case of medicinal plants, such plants are viewed like personal friends that have to be treated in that way. This is an orientation we have to restore in our lives and which was typical to most Indigenous Peoples. The practice of hunters asking forgiveness from prey is different from the brutal ways we raise animals industrially. We need to learn from a community that was adapted to life in a harsh environment and that lived a life closely aware of the carrying capacity of this environment. They have a deep understanding of dependencies and interdependencies that escapes people in modern life. Today their well-adapted system is being destroyed but in its very essence it has many valuable lessons to teach. As for The Lab, we have some ambitious plans for the future; we need to consolidate our experience of the last five years and move forward to a whole new level. In the process, we are developing a graduate level certificate program—The Lab's Global Sustainability Fellows Program—in collaboration with 12 universities from around the world, to allow students in different disciplines to gain intensive exposure to issues of sustainability. We are working on developing a global network of R&D centers that map onto specific eco-zones, and look forward to launching model projects in different ecologies. Long term, we would like to see The Lab emerge as a preeminent global resource for advancing a peaceful transition of world society, its economy and its institutions to a sustainable basis.

Opposite page: Ali Alhawashleh, member of the project team, preparing health products from traditional medicinal plants.

This page: Founders of the Wadi Attir Association. Top row: Hani Ghadi Fahed Alasibi; Ibrahim Alatrash; Ali Abu Ikean; Aattef Abu Ajaj; Naifa Alnabari; Dr. Michael Ben-Eli; Yor. Nabari. Front row: Mohammed (Shahdeh) Abu Sbeit; Dr. Mohamr Alnabari; Ali Alhawashleh; Mariar Abu Rakayek.

Photos by Wolfgang Motzfi-Haller.



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