

GREEN²⁰⁰⁰ NEWS

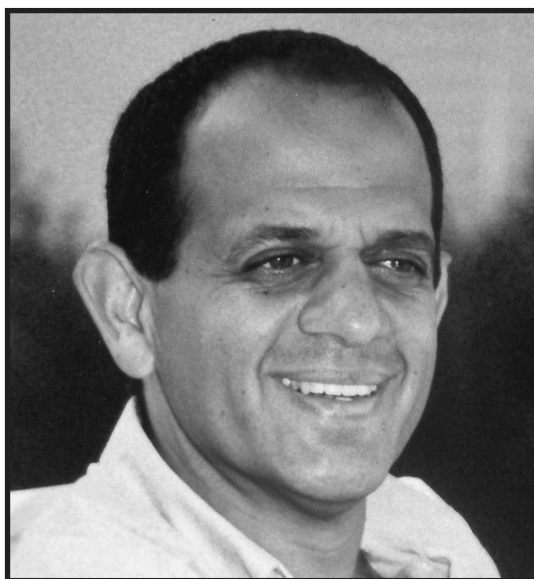
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Green 2000 Ltd. is one of Israel's leading companies for agricultural supplies and know-how. With over 20 years of experience in projects in Israel, its home land, and all over the world, the company provides professional turn-key projects for its customers, from consultation and design, through construction and implementation, to on-going management services. "During the years we have gained vast experience through an array of projects in different climatic conditions such as extremely high temperatures, tropical and dry climates" says Mr. Rafi Dayan, CEO and founder of Green 2000 Ltd.

Mr. Dayan is known for the establishment and management of one of Israel's most prestigious research institutes in the ARAVA region, famous for its expertise in arid regions agriculture. "Green 2000 maintains constant relations with Israeli research institutes, which enables us to provide our clients with advanced growing techniques along with state-of-the-art equipment and a personal service" explains Dayan. In the last decade, the company has been responsible for the establishment and management of greenhouse vegetable production, open field, orchards, poultry and eggs production projects, dairy farms as well as aquaculture projects in Angola, Guinea Equatorial, Nigeria and Kenya.

When asked which of the projects makes him especially proud, Dayan finds it difficult to choose. "Each project brings with it different challenges, and even after 20 years, every new project and every new client are as exciting for us as the first ones. The fact that once a first project in the country is completed a second project is immediately being asked for, is the best evidence to our success", he finely says. "Green is always invited to initiate a second and a third project in the country, and that gives me the best indication that we are doing things right".

In the last few years Green 2000 Ltd. has developed and established several Agricultural Services and Training Centers (ASTC) in Africa, to support smallholder farmers. The ASTC offers those farmers an opportunity to become commercial profitable farmers. "The fact that we help poor smallholder farmers to greatly improve their agriculture and lifestyle, gives me and my team a lot of joy and satisfaction. We seem to succeed where many others have failed" concludes Dayan.



Mr. Rafi Dayan, CEO of Green 2000:
"Our clients never stop at the first project"

Name: Refael (Rafi) Dayan

Age: 57

Studies: M.Sc. Agriculture, LL.B. Advocate

Position: Owner and CEO of Green 2000

Vision: Bring modern and sustainable agriculture to farmers in Africa

Family: Married + 3



The African Story of Green 2000

Green 2000 undertook its first project in Africa in 2001, establishing a greenhouse and a poultry farm in Angola followed by comprehensive-service agricultural training center. Since then, Green 2000 had implemented six more agricultural projects in Angola, seven projects in Nigeria, two in Equatorial Guinea, and other projects in Kenya, South Africa, Chad and South Sudan. Green 2000 lives and understands the African reality. The company conducts most of its operations in Africa. While Green 2000's headquarters reside near the ancient roman port of Caesarea in Israel, it operates two regional offices in South-Africa and Zambia and keeps agents in a large number of capitals in the continent.

The Green revolution

In the course of its projects, the company improves local cultivation practices of different food types, from vegetables in greenhouses and open field crops, through fodder and grains, to poultry for meat or table eggs, aquaculture and dairy products.

These improvements naturally result in financials profits for the local farmers, but in fact have a much more significant impact on their lifestyles.

Wherever Green 2000 sets up its Agricultural Services and Training Centers (ASTC), the entire region enjoys an economic, professional and social boost.

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Farmers, who were previously dependent on an ox or a horse for the cultivation of their fields, start using tractors and achieve yields of 500 kg per area unit instead of the 100 kg yields they were used to.

As the farmers become richer, they aspire to expand their fields and their income. They therefore take on workers and create employment. The higher yields signify reduced dependency on import. This is the Green Revolution, and it brings on a nationwide impact.

The Manpower Challenge

In its activity Green 2000 deals with a variety of challenges, the biggest of which is human capital. African farmers and technicians lack experience in commercial farming. Therefore, in order to achieve sustainability, the first step towards establishing a project, is to identify 5-6 high motivated and skilled local workers to be qualified as local managers, trainers and project leaders. Choosing the right leaders is essential for the project's sustainability.

Finance

Green 2000's projects in Africa are funded by both private and government elements. Green 2000 designs its projects to maximize profitability and provides comprehensive economic evaluations for its clients in order to aid them in attracting financing packages. In some cases Green 2000 manages to obtain funding for its clients from European, American and Israeli sources in the form of relatively low-interest long-term loans.

Not Only in Africa

Green 2000 is active in other continents as well, and is presently building greenhouse complexes and large projects in Ukraine and Vietnam, with successfully completed operations in Mexico, Kazakhstan and many other countries. In Israel, the company maintains its research and development activity through a team of professional agronomists, experts in the fields of seeds and other agricultural outlays. This activity provides the expert support needed for the success of the company's on-going projects abroad.

Why ASTC ?

Agriculture Service and Training Centers

ASTC - The Agriculture Service and Training Centers (ASTC) introduced by Green 2000, combine Israeli models with advanced technologies and decades of experience gained by Israeli and international experts in Africa. The ASTC is a unique concept, aiming to empower smallholder farmers and improve their productivity. The ASTC offers its members on-going training, technical support and services, resulting in a dramatic improvement in their farms' profitability and their living conditions. Several ASTC's are already function in Africa, with a great success.

Most African countries enjoy attractive conditions for agricultural development: land and water availability, cheap labor and increasing local and regional demands for quality food. In that regard, the main obstacle remains lack of infrastructure: roads, ports, electricity, and a lack of the local agricultural knowledge needed for the establishment of modern agriculture.

All over Africa, the greater part of the land is owned and cultivated by smallholder farmers. Under those circumstances, any agricultural development should start by enhancing the productivity of smallholder farmers.

In this context, it seems that the Israeli experience is most interesting and relevant to Africa. The Israeli agriculture is a quality, modern, export-oriented agriculture, based on smallholder farmers, organized in cooperatives. Israeli agriculture offers technologies, experience and models which are probably the most relevant to the African reality.

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The ASTC offers its members on-going training, technical support and services, resulting in a dramatic improvement in their farms' profitability and their living conditions. The ASTC is a fast implantation project with an impact over a large number of farmers and a clear commercial orientation, offering training and knowledge combined with a continuous learning process. The project makes use of existing farmers' unions and associations as a mean for reaching every farmer.

The ASTC offers its members a package of services meant to promote modern production methods, increase and stabilize yields and allow year-round production. The center's services include tractors and other mechanization services for tillage, fertilization and harvest, as well as farming tools essential for obtaining high yields and at least two cropping seasons a year.

As long as the small farmer earns enough, it does not matter whether he grows onions, bananas, mangoes, rice, fish or poultry. There is no point in agriculture production – efficient as it may be, if it doesn't guaranty the required profitability to ensure dignified living conditions for the farmer.

Having said that, the ASTC is not a magical solution. After all, in agriculture, one must always expect the unexpected. Hence the key to success is management quality. The ASTC requires nothing less than the highest level of management. Green 2000 is committed to build the local capacity for a sustainable local self-management.

The ASTC builds the basis for modern agriculture in Africa, to finally allow its inhabitants to live up to their potential and enjoy the fruits of their hard work.



Green's Poultry & Aquaculture Integrated Projects

The rise in living standards in Africa during the last decades and increasing demands for quality food, are reflected in a growing demand for animal protein. Extensive livestock and poultry farming, as done in Africa for generations, can no longer meet domestic demands for eggs and meat. This is the main reason for the intensive growth in import. Over the years, Green 2000 has designed, implemented and managed several poultry and aquaculture projects in Africa. Most projects are integrated turn-key projects, with tailor-made specifications according to the customers' needs, based on market demands, the required production volume and budget limitation.

The situation in the African marine front is not much better. Although Africa's oceans are still relatively rich in fish and sea food, they are being rapidly depleted by unregulated excessive fishing. At the same time, demands for freshwater fish are constantly growing while rivers and lakes are limited in supply.

Under those circumstances, the current price of animal protein in some African markets is similar to, or even higher than prices in European and North-American markets.

All these factors mentioned above inevitably lead to the conclusion that the development of a local African livestock industry is called upon. However, commercial livestock breeding is a challenge not to be underestimated. It requires knowledge and technology transfer as well as supporting infrastructure and services such as quality animal feed supply, veterinary services, refrigeration systems, wastewater treatment for pollution prevention, improvement and development of species and so on.

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Green 2000's projects are built in a modular fashion which allows expansion of the production capacity in several phases. This way, Green 2000's customers are able to adapt their business to market demands.



A turn-key integrated project allows the customer independence throughout the production chain, from breeding, through feeding, growing, processing and marketing, in environments that often lack the necessary support infrastructure.

Those types of projects often require government protection, especially regarding frozen chicken and eggs' import regulations. Unlimited import, as found especially in coastal African countries, puts off investments and forms an obstacle to the development of a local food industry.

As a part of its special initiative to support smallholder farmers, Green 2000 is busy locating and developing models which allow profitable livestock breeding at the farmer's back yard. The company provides smallholder farmers with small size kits, which allow them to grow 10-15 ton poultry for meat annually, or produce 250,000 table egg annually.

Mini kits for fish production in water-rich areas are also available, with a production of 25-50 tons (tilapia or catfish) annually. Those projects require relatively moderate investment, combined with Green 2000's knowhow transfer. The support package includes technical assistance, training, quality animal feed, cooling system for secure marketing and more.

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ARAVA - The Israeli Village of Africa for the Next Generation of African Farmers

While Green's ASTC offers an effective model for the current generation of African smallholder farmers, the next generation of African farmers will have to lead the agriculture production into export oriented, modern and selves' sustained farming. To deal with those challenges there is a need for a dramatic change in African rural areas and in the structure and character of the African village. Arava - The Israeli Village for Africa, designed by Green 2000, offers an effective model with the potential of helping African governments deal with those challenges.

Arava is designed for 100 families and can be easily expanded to up to 200 families. Each farmer will own a 0.5 hectares cultivated plot attached to the house (Plot "A"), and the cooperative will own a field crop area of 1,500 hectares for joint cooperative field-crop production (Plot "B"), an Agro-Industrial Center and a Logistics and Mechanization Center for supporting the cooperative and the private activities.

Plot "A" will serve both for self-consumption and commercial activities. All 100 farmers, members of Arava, will grow vegetables and open-field crops. Each family plot will include:

- A 3,000 m² irrigated plot for vegetable and open-field crop production
- 2 greenhouse tunnels of 250 m² each, for year-round vegetable production
- 25 m² of storage facilities

Each farmer will also specialize in an animal production activity according to the following specialties: broilers, layers, piggyery and dairy.

Plot "B" of 1,500 Ha will be jointly cultivated by the cooperative, while 1,000 Ha are irrigated and 500 Ha rain-fed.

Arava farmers will be members of a cooperative. Each family should earn 1,500-1,600 USD per month from its individual activities, and additional profits from its shares in the cooperative profitable activities.

In addition to plots "A" & "B", Arava will include a Logistic and Mechanization Center and an Agro-Industrial Center, owned by Arava's cooperative including a vegetables nursery, a packing-house and post-harvest services, a feed mill, a dairy factory, a hatchery, an egg sorting and packing warehouse, a pigs mothers herd and a fattening center, a central slaughterhouse and a sales and marketing office.



The logistic and mechanization center will include among others a garage and tools center, a maintenance division, central storage facilities, a fuel station, a weighing station, a farmers' agro-supplies shop, a local R&D center and a laboratory, a generators and electricity center, offices, toilets and showers.

The Arava new village provides new houses, 75 m² each, for its members - the farmers, and for civil workers employed by Arava. The village is equipped with modern infrastructure and all the necessary facilities to accommodate a high quality community life.

A community center will be established for the benefit of Arava's residences, with a school and a kindergarten, a medical center, community halls, a grocery shop and other commercial businesses, playgrounds, sports facilities and other necessary community services.

Arava's main advantages

- A dramatic improvement of welfare in Africa's rural areas and the creation of a quality rural lifestyle in the most isolated regions of Africa;
- Improvement of production quality;
- High and sustainable profitability for the farmers, allowing them to become active participants in the country's economic scene;
- Job creation for hundreds and later-on thousands of men and women, above all the younger farmers;
- The creation of business opportunities in rural areas;
- Training of the future generations of African farmers;
- The creation of a solid base for an export-oriented economy and agro-industry, to reduce and replace import.

 **Arava**
The Israeli Village



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