

2015 Land for Life Award Winner

Elion Resources Group



“I had the opportunity to witness the incredible transformation of degraded land through the innovative ecological land management approach of Elion Resources Group. Their initiative in taking the lead to implement “Greening the Silk Road” can be emulated by international business corporations that are committed to conserving our limited natural resources worldwide.”

Monique Barbut
Executive Secretary UNCCD

The miraculous transformation of Kubuqi

The Kubuqi Desert is the seventh largest desert in China. It lies to the north of Ordos Plateau in Inner Mongolia, covering 18,600 square kilometres. In the 1980s, over 100,000 herdsmen and farmers suffered from the Kubuqi’s harsh weather and sandstorms. Kubuqi Desert was one of the three major sources of sandstorms that would engulf the Beijing, Tianjin and Hebei areas. A strong wind in Kubuqi would blow the sandstorms to Tian’anmen Square overnight. Sandstorms made the roads often impassable, worsening the poverty in Kubuqi. Many communities lacked access to basic public services, like schools, hospitals, electricity and roads. Kubuqi Desert was locally known as the ‘Dune of Death’.

However, twenty years later, the desert has been transformed into a scene of vigorous, vast greenery, home to around 100 species of plants and wild animals, including swans, hares and the Euphrates Poplar tree. Far from being a degraded ‘Dune of Death’, Kubuqi now attracts 200,000 visitors annually.



Kubuqi back in 1988 and 2012

This spectacular change was driven by the vision and innovation of locally-born Mr Wang Wenbiao, then a salt factory manager in Kubuqi. He established Elion Resources Group in 1988 and began his journey of land restoration.

Elion initial investment in road construction to transport the salt production was then extended to tree plantings over 10,000 square kilometres in Kubuqi, establishment of liquorice and other Chinese medical herbs pharmaceutical industry in Kubuqi, green energy production park and many more. Today, it is estimated to value over RMB 100 billion. The restoration project has benefited over 100,000 farmers and herdsmen, with local incomes increasing from RMB 500 in 1988 to RMB 30,000 today. Public infrastructure such as roads and schools were also built. The desert’s nickname has changed from the Dune of Death to the Golden Dune.

Innovations hold the key

A number of technological innovations by Elion have been critical to the desert restoration process. For example, with the integration of local knowledge, Elion introduced over 1,000 germplasm resources

that are cold-drought resistant and saline-alkaline tolerant, which have helped restore the desert’s ecosystem. Another breakthrough was the development of water-jetting for watering freshly-planted trees, which boosts the trees’ survival rate from 20% to 85%. Elion also implemented a sand barrier technology, adopting a grid pattern of bundled Salix (willow) stems, which has helped to stabilize sand dunes.



Water jetting planting technique and sand barrier technology using grid pattern of bundled Salix stems, crop straw and other materials.

Liquorice is a local, drought-resistant, medicinal plant in Kubuqi, which Elion has extensively planted in its efforts to turn the barren Kubuqi land into a thriving medicinal production centre. Today, over 200 square kilometres of medicinal plants and herbs are grown. In addition, an ecological-based industrial chain has been introduced by planting forage and feed crops to expand the livestock industry. Manure from the livestock is collected as organic fertilizer, used in tree and herb planting, as well as in biogas power generation. Elion also takes advantage of Kubuqi’s ample sunshine and space, and has invested in solar and wind renewable energy, supplying electricity to the locals as well as the factories.

Working closely with communities and international bodies

One of the project’s driving successes has been its active engagement with locals, as well as its creation of additional local jobs, spurring the economic growth in Kubuqi. Through its strong community partnership, Elion successfully mobilizes thousands of people for its annual seasonal tree and grass planting. International partnerships with such agencies as UNEP and UNCCD have raised awareness about the importance of local participation in restoration. Elion’s close collaborations with scientific research institutions have helped drive innovation in improved techniques to control desertification.

For more information about Elion Resources Group:
<http://english.elion.com.cn/>

More about Land for Life programme:
<http://www.unccd.int/en/programmes/Event-and-campaigns/LandForLife/Pages/Land-for-Life-Programme.aspx>

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SEKEM



“SEKEM’s sustainable land practice through biodynamic agriculture has successfully turned unproductive land into productivity, and benefited the locals. Their ecological and social approach business model can transform vast areas of degraded areas if replicated in other parts of world that are combating desertification.”

Monique Barbut
Executive Secretary UNCCD

An idea that was once thought impossible

“In the beginning I thought that these are some crazy ideas from Europe. There was almost nothing around my home town but desert and drylands. Today, we have green fields, roads and villages with schools and medical care,” exclaimed Aied Abdel Hamed, who has worked on the SEKEM farm for almost 30 years.

But dry lands and desertification are still visible elsewhere in Egypt. In fact, 90% of the land is degraded, with the only natural fertile soil located along the Nile River, and only 6% of that land can be used for agriculture. Egypt also suffers from water scarcity. The water availability per person per year is much lower than the global average (i.e. a water poverty index (WPI) of 600m³/year per capita which is below the standard WPI (1,000 m³/year per capita)). Agriculture alone consumes 85% of the fresh water available in Egypt and rainfall is rare in Egypt which makes artificial irrigation indispensable. The combination of rising world food prices, limited water resources and agricultural land, rapid population growth, climate change, and desertification are making it more and more challenging for Egypt to feed its people in the future.

SEKEM was founded by Dr. Ibrahim Abouleish in 1977, who introduced the idea of integrating societal, economic and cultural life into the everyday business operations. It is fighting these odds and changing livelihoods one household at a time. Using the biodynamic agricultural principles, he turned an untouched 70 hectares of barren land in the Egyptian desert into a dynamic and successful bio-agribusiness in Egypt.



Inauguration of Sinai Organic Farm in 2007 (left) and the farm in 2012

Today, SEKEM owns 500 hectares of biodynamic farms and has recently started three land reclamation projects covering more than 2,000 hectares of degraded land in other parts of Egypt. It is combatting desertification and winning through a holistic business model that integrates human development, fair opportunity and income and ecological and cultural development in its daily operations. Leaders in SEKEM also see this approach for its long term competitive advantage.

More jobs and fairer income

In addition to applying the biodynamic principles throughout SEKEM farms, the organization promotes this form of sustainable land management across the country. Facilitating the establishment of the Egyptian Biodynamic Association (EBDA), SEKEM and EDDBA have helped more than 400 farms covering more than 325 hectares land to adopt organic farming practices. EBDA also trains farmers, helping to raise the awareness of the practices. And this has in return helped the textile industry in Egypt, which nowadays uses 90% less chemical after adopting sustainable agriculture practices. In addition, EDDBA helps land users to get certification for their organic products, opening up new market channels for the producers.



Fairer income for the local producers and workers

Through EBDA, SEKEM has contracted more than 400 farmers and producers whom they offer a fairer income or a fixed contract with fixed prices for their produce. SEKEM pays the farmers 20% above the prevailing market price. This has contributed directly to better incomes and more job opportunities in farming. SEKEM’s group of companies has also created over 1,500 jobs that benefit the local communities directly.

SEKEM also commits to produce and sell about 75% of its produce locally to reduce Egypt’s heavy reliance of imported food products. Only 25% of the produce from SEKEM is exported. The local consumers thus also benefit by consuming its high quality produce.

Giving back to the community

SEKEM’s work goes beyond sustainable land management. Today, it covers social and human development. SEKEM Development Foundation (SDF) has established a nursery, a kindergarten, schools and a vocational training centre to enable those who have little opportunity to get education. In 2012 the Heliopolis University for Sustainable Development was set up to provide more opportunities for national and international students to deepen their knowledge in sustainable development technologies that integrate societal and cultural value. A medical center was also set up to provide healthcare to SEKEM employees and their families and also local people at SEKEM project sites.

For more information about SEKEM:
<http://www.sekem.com/>

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