World Resources Report

Egypt, SEKEM, and Climate Change

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Question Eight: How can national-level governments learn from the private sector and encourage investment and decision making to promote the public good in a changing climate?

Egypt is a typical example of a developing country that is highly vulnerable to climate change and faces numerous threats to its economic, social and environmental sustainability – including energy, water, and food security. This causes enormous fundamental pressures on Egypt's competitiveness, and presents a growing threat to national security. These threats are fueled by a growing population and rising associated demand, coupled with the constraints of a finite resource base. The authors go on to describe SEKEM's approach to addressing climate change by applying biodynamic agricultural methods, the company's comprehensive management approach to sustainable development, and the need for Egypt to adopt a national Green Transformation strategy.

Today the world is facing multiple crises – economically, socially and environmentally.

Every year, the United Nations and representatives from the private and civil sector convene to find solutions to climate change and its threats to economies and livelihoods. Very recently, the annual conference was held in Cancún, Mexico. Expectations to reach a consensus breaking the political and financial deadlock

were low. The outcome shows however that the international process to stem climate change is still alive and ongoing.

Developing countries are particularly affected by climate change as they are mostly located in regions that are more susceptible to its impact. In addition they typically lack the financial resources and technological expertise for adaptation to climate change or its mitigation.

Egypt and Climate Change

Egypt is a typical example of a developing country which is highly vulnerable to climate change and which faces numerous threats to its economic, social and environmental sustainability. This causes enormous fundamental pressures on Egypt's competitiveness. These pressures can also be described as growing threats to national security. They are fueled by a growing population and growing demand coupled with the constraints of a finite resource base and could develop into genuine crisis situations if not quickly and decisively addressed. These pressures include:

Energy Security — Unsustainable use of energy resources is one of the major reasons for environmental degradation and climate change. The consequence is energy scarcity and rising energy prices which increase poverty, strain national budgets and jeopardize Egypt's competitiveness for the future.
Water Security — Global warming results in sea-level rise due to the melting of glaciers and arctic ice. Consequently, the world's fresh water resources decline while salt water intrudes into underground reservoirs. Egypt is particularly susceptible due to its low-altitude Nile Delta.
Food Security — Limited water and agricultural land coupled with population growth and other factors are creating mounting pressure on Egypt's ability to provide food for its people in the future.
Climate Change — Declining precipitation levels, changing weather patterns, and rising seas in the Nile Delta are slowly but steadily making a difficult situation worse, especially in the area of food and water.
The Need for Jobs — Egypt's young population is hungry for work, and Egypt needs to generate over one million new jobs every year for its growing workforce.
The Poverty Gap — With millions still living under the poverty line defined by the United Nations, Egypt must lift the standard of living for those most in need.
The Financial Crisis — The continuing impact is being felt around the world hitting national budgets hard also impacting the availability of investment capital and development aid.

Companies are very much affected by the scarcity of available resources and they cannot survive in the future if they cannot predict and adapt to major trends like climate change.

SEKEM and Climate Change

SEKEM's approach to climate change encompasses both adaptation and mitigation. Our group of companies applies biodynamic agricultural methods, a premium quality method of organic agriculture. Biodynamic Agriculture has lower greenhouse gas emissions than conventional agriculture and a higher potential of carbon soil sequestration. A 100% conversion of global agricultural land to organic agriculture would transform the agricultural sector from a significant contributor to climate change into a net carbon sink. The mitigation potential of agriculture - meaning its future risk reduction potential - is therefore high.

With regard to adaptation, SEKEM is already taking action to reduce risks and limit the damage caused by climate change. Biodynamic Agriculture is superbly placed to improve the odds for climate change adaptation – notably through diversification, water efficiency, resilient crops and increased drought and flood resistance. Like this, SEKEM reduces its own risk of operating in an environment that is highly vulnerable to climate change and at the same time can be a business role model that provides solutions for one of the world's most prevalent challenges.

In its Sustainability Balanced Scorecard (SBSC) system – the Sustainability Flower (SF) – SEKEM keeps track of indicators relevant to the above mentioned challenges but also to sustainable development in general. The SF is a communication and information management tool symbolizing the concept of sustainable development in its four dimensions (ecology with its six sub-dimensions, societal life, cultural life, and economic life). Each dimension has several performance aspects, and different performance indicators (based on the Global Reporting Initiative standard) with specific targets. Adaptation is addressed with indicators such as "assessment of water usage" and "energy savings".

SEKEM uses the SF as a communication instrument for all its stakeholders (clients, employees, customers, investors, business partners, media etc.) in order to build an ethical / responsible image of the company, and to serve as a role model for other organizations which aim to implement a sustainable development approach. As a strategic management tool for collecting data on SEKEM's economic, social, cultural, and environmental performance the SF helps to align the organization with its vision, mission, and policies. Most importantly it supports management in setting targets, measuring progress, and identifying room for improvement. The

contribution of individual SEKEM companies to the overall sustainable development of the SEKEM Holding becomes clearer and more transparent after applying the Sustainable Development Scorecard (SDS) - also on an individual company level.

SEKEM constantly strives to increase its adaptation and mitigation potential through its own research and development efforts carried out by its scientists. Furthermore, SEKEM will soon complete the construction of the Heliopolis University for Sustainable Development, an institution solely dedicated to developing the awareness and capacities of its students to effectively tackle our major developmental challenges such as climate change.

To increase leverage, SEKEM also engages on a political level to lift sustainable solutions such as organic agriculture onto the national agenda. SEKEM is engaging with both national and international stakeholders such as the UNFCCC climate negotiations, the World Future Council (on future finance, sustainable cities etc.), the UN Global Compact (water, climate change, etc.), and the World Economic Forum (social entrepreneurship, food security, social innovation, etc.). On a national level SEKEM's networks are also closely linked to national movements and initiatives towards a more sustainable future and the transition of Egypt into a low-carbon economy.

In summary, SEKEM has recognized climate change not only as a challenge but as a business opportunity to increase its competitiveness. Sustainability is a factor not only desirable in human terms but necessary in order to successfully cope with risks that urgently question "business-as-usual behavior". It encapsulates the essence of what national-level governments can and should learn from the private sector.

Existing national strategies in Egypt across sectors and ministries reveal a remarkable awareness of the value of a "Green Transformation" to Egypt's competitiveness and future development prospects. The Egyptian National Competitiveness Council (ENCC), a non-governmental organization, is a leading organization in pushing the Green Transformation of Egypt forward. SEKEM supports and shares expertise with the ENCC. The Green Transformation consists of an integrated package of technologies, policies, and behavior changes designed to promote greater innovation, efficiency, cost reduction, shock resilience, and job creation by focusing strategic attention and investment on the following areas: *Water Conservation; Energy Efficiency; Renewable Energy; Sustainable Agriculture; Eco-Cities; Eco-Villages; Eco-Tourism; Green Industry; Green Transport; Waste to Energy; Poverty Alleviation Programs; Programs to Increase Equity.*

Many strategy documents include "green" elements such as water conservation, renewable energy, or eco-tourism. However, these existing strategies do not cover the need for a more integrated approach that puts a Green Transformation at the center of planning for economic competitiveness.

Egypt's strategic priorities in the area of Green Transformation should not be framed in terms of marginal savings or efficiency improvements. They need to be framed in terms of job creation, climate resilience, energy independence, poverty reduction, and other major national goals — for these are the benefits that Green Transformation approaches are now known to deliver.

A Green Transformation approach should be seen as a modern, strategic response to Egypt's needs today in an ever more demanding global economic arena, and in the era of global climate change. Egypt still has the opportunity to be a regional and even global leader in the race to create efficient, competitive, "green" economies. In fact, if it does not choose this path future prospects for the country are difficult to put into optimistic terms.

These are some of the consequences Egypt will face if it continues down a conventional development road without integrating a "Green Transformation" approach into its national strategy for competitiveness:

- Loss of energy independence
- Inevitability of conflict over water
- Vulnerability to climate change
- Lost / locked-in capital investment (into non-green assets)
- Threat to key industries such as tourism

The establishment of a national strategy for Green Transformation must begin with a vision – just like many companies have a vision or organizational culture. Key decision-makers as well as ordinary citizens must be continuously encouraged to imagine a better, greener, more competitive future for the nation. Good vision needs to be specific and Egypt's vision should include clear objectives tied to visible and credible strategic pathways for achieving those objectives. They should also include extra-financial indicators for success. The entire program should be supported by continuous public education and communication. Every possible channel and creative means should be employed to keep the vision of a Green Transformation present in the public eye.

It is apparent that there are many parallels between the private sector and national-level governments with regard to the challenges and opportunities of a changing climate. It is however also fact that national-level decision-makers have to deal with

a more complex web of factors. Still, the state has to take a more passive role in order to allow the civic, private, and public sector to interact and collaborate better. This needs the right mix of incentives and forms of private-public-partnership. An integrated approach is key. Governments have to support the private sector in their climate change adaptation measures while synergies and common policies have to be identified. The cooperation between SEKEM and the ENCC, and again that of the ENCC and the government is an example of such an integrated approach. Here lies the greatest potential to overcome global challenges such as climate change.

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