



A Syrian ECOpreneur

By Mads Pazyj, the Danish Embassy in Damascus

Think of a society where people are self-sufficient in food and energy, with zero emission of carbon dioxide and minimal usage of water resources. For many this would be a fictional dream world, like Thomas More's Utopia, but for Khaled Mahjoub this is a real and present concept.

The Centre of Excellence

Khaled Mahjoub welcomes us an afternoon in October at the Centre of Excellence, a research and exhibition centre in the outskirts of Damascus. The centre is a place for applied research, which in Mr. Mahjoub's own words "aims at demonstrating an operational, full-size environmental and economical solution to acquire independence from fossil fuels." The centre is concentrated around an energy self-sufficient house which is built to house five persons. In addition to a house, with all modern household appliances run purely on solar power, the centre also holds an integrated agricultural concept, which provides the residents with a food basket containing different vegetables, irrigated by waste water from the house.

The water and waste management of the house is built around efficiency and effectiveness. The residents in the house will, on average use only half of the water usage of ordinary residents in Syria due to an internal recycling system. And instead of disposing of the waste water from the house, it is transferred to the vertical agricultural production where an algae-production cleans the water for the vegetables and as a spinoff provides the house with bio fuel from the algae.

Everything in the complex is built with efficiency in mind, from the sun-tracking solar panels which automatically optimizes the direction and angle to the sun, to vertical



Khaled Mahjoub in front of his Centre of Excellence.

agriculture where a three-dimensional approach limits the area required for providing a person with vegetables to five m².

The ECONOMY in the concept

When asked about the main difference between his concept and other concepts of environmental efficiency, the answer is prompt: "I am talking about ECONOMY – We need ECOpreneurs not entrepreneurs." One of the ideas of the inventions and solutions is that it all should be financial feasible – it should provide an apparent incentive to use the concept in form of immediate return on the investment, instead of only long-term payoffs. All of the solutions are made with materials at conventional costs and can be built using unskilled labour. The idea is that it should be possible to use this concept as a direct alternative to regular housing – without increased capital funding.

The fact that Mr. Mahjoub is also a successful businessman further adds to the validity of the financial aspects of his ideas. The centre is financed by Mr. Mahjoub himself and he sees the research as an investment in the

environment and in the future. When asked if he ever has doubts about the future and success of the concepts he simply states that "right is always right."

Bringing added value

Khaled Mahjoub was born in 1962 into a family which valued both industrial and agricultural production. His family was hard-working and placed more value in work than in wealth, believing that all persons should bring added value to the table – a value set that has guided him throughout his life. The hardworking approach made Mr. Mahjoub a successful entrepreneur and the continuous research has provided him with several patents in both Syria and USA. At present his business has gone international with production facilities in USA and currently holds 470 employees. But still Mr. Mahjoub finds time to focus on the Centre of Excellence and its seven employees.

Bigger scale for the future

For Mr. Mahjoub there are still many visions for the future: Liberating the agricultural sector from fossil fuels by enabling them to produce bio-energy, reducing fossil consumption in

