

# ARCHITECT OF ENTERPRISE

*By Alexandra Hall*



*Ayman Ismail. Photograph by Audrey Lodes*

When Ayman Ismail became a professor at the American University in Cairo and the academic advisor for the university's Entrepreneurship and Innovation program in 2011, the field was still in its infancy. But Egypt's modern history already had a vibrant entrepreneurial culture. Alexandria, for example, was home to the largest commodity exchange in the world in the late nineteenth century. Egypt saw visionary enterprise ranging from economist Talaat Harb's founding of Banque Misr in 1920 to the establishment of EgyptAir in 1932 as one of the first ten air carriers in history (Harb was notably passionate about the creation of local industries founded by his countrymen).

It was not until the development of tech startups in the 2010s that there was a notable shift in entrepreneurial interest, and it is in this momentum that Ismail found himself drawn back to his homeland. He had previously cofounded a management consulting company with his brother, as well as a social enterprise incubator called Nahdet El Mahrousa with a group of close friends. After finishing his PhD in international economic development at the Massachusetts Institute of Technology in 2009, Ismail arrived at a particularly flexible moment in his career and toyed with the idea of moving back to Egypt—and then came the Egyptian uprising. Grippled by the movement around him, he received an

offer from AUC and, as he puts it, “the rest is history.”

Ismail’s work with the Entrepreneurship and Innovation program revolved around creating a space for ideas and growth and raising overall awareness, what he refers to as “seeding the ecosystem”—which resulted in forty partnerships and the training of six thousand youth. Now, as the Jameel Chair of Entrepreneurship and founding director of the university’s Venture Lab, Ismail is involved in everything from the lab’s leadership to personal mentoring. However, he remains best known for helping many navigate the risky world of entrepreneurship.

The Venture Lab is a startup accelerator program at AUC’s New Cairo campus. Since 2013, the program has devoted over 2,200 mentoring and training hours to building the capacity of more than 150 startups, resulting in the creation of over eight thousand jobs and 450 million Egyptian pounds (or \$28 million) in revenue. This includes the development of some of Ismail’s favorite companies such as Rology, an AI-assisted, on-demand teleradiology platform. Given a global shortage of radiologists, Ismail says that Rology fills a crucial space in urgent care, where “a minute can be the difference between life and death.” Another is the popular transportation service Swvl, a low-cost bus transportation network that is currently the fastest-growing company in Egypt. Along for the ride since their beginning, Ismail fondly recalls when Swvl’s founders told him they had received their first offer from an angel investor. “These are the kinds of moments that you really enjoy and cherish,” Ismail said.

The unique advantage of the Venture Lab is simple: presence on a university campus. Ismail explained, “universities are not about teaching, they’re about knowledge—knowledge, innovation, dissemination.” By connecting policymakers to program designers, entrepreneurs to engineers, the university is facilitating interactions capable of producing tangible results for the Egyptian market.

Programs like the Venture Lab offer a model for the rest of the country, and even the region, of opportunities for accelerators and incubators. Several years ago, governments tended to overlook entrepreneurship in favor of small and medium-sized enterprises, and only recently became aware of its importance and potential. Ismail was optimistic about this shift in view, saying, “That’s a major change over the long term. That’s how we bring cultural change.” He is currently advising the Egyptian Ministry of Planning on incorporating entrepreneurship into Egypt’s sustainable development strategy.

The entrepreneurial scene is currently skyrocketing. “I think it’s probably an inflection point, and the quality [of work] ... in the next three years is going to be different, because more people and different people are getting into that space.” Young and mid-career professionals are choosing careers in entrepreneurship, enticed by wealth creation, independence, and serious career options. However, he predicted that when the market cycles downward, those who view entrepreneurship as a short-term opportunity will filter out, ushering in another, more serious wave.

That said, Ismail believes in the ability of younger people to pursue business ambitions. His advice to young entrepreneurs is, “Invest in yourself, before you get into anything.” He is an advocate for informed experience and explained that this does not have to mean building general work experience for a decade, but requires at least having been inside the industry: “Just understand what’s happening in that space. And then start whatever you want.”

The best example of how a consistent, intentional learner can succeed is

Ismail himself. In a field where the latest information and resources are rapidly developing, he never assumes that he knows more than his students, despite his extensive experience. As they ask him questions throughout his classes, covering entrepreneurship and entrepreneurial finance, he does not give out answers immediately, but asks questions in return. As he stressed, “The smartest person in the room is the person who is asking questions, not the person who has all the answers. So that’s what I do.”

# NILE VIEW

## THE MOST SEVERE THREAT FACING MENA

*By Nabil Fahmy*

**W**ater scarcity is one of the most pressing issues facing the international community today and has gained widespread attention recently due to the rise in global temperatures and the increase in water consumption in a number of countries, especially those in the Middle East. Despite these concerns, many nations remain unprepared to confront water scarcity and continue to fail to make the issue a political priority.

The shortage of water in the Middle East has worsened in the modern era due to high population growth rates, urbanization and the expansion of cities, the low price of water, and inefficient water management. These factors have created an unstable—and extremely dangerous—situation, which will impact the availability of water and risk exacerbating tensions between countries in the region.

The UN Intergovernmental Panel on Climate Change has predicted that the Middle East and North Africa (MENA) will be among the regions most impacted by global warming in the twenty-first century through a heightened risk of drought and flood, which will reduce agricultural productivity, impact food

stocks, and harm the most disadvantaged of the population.

About 5 percent of the world's population lives in the MENA region, which contains only 1 percent of the world's renewable fresh water. Water was available to citizens at an annual rate of 819.8 cubic meters per capita as recently as a few years ago, which is more than 25 percent less than the global average. Meanwhile, 60 percent of the region's population lives in areas suffering from surface water shortages, while the global average stands at about 35 percent. Despite the region's scarcity of water, MENA has the world's lowest water tariffs and the highest percentage of GDP spent on water subsidies. This has led to irrational use of water resources and over-pumping of non-renewable groundwater. These are striking examples of both poor water management and the region's lack of appreciation of the urgency of this issue.

Groundwater, large transboundary rivers, and desalination represent the main sources of water in the region, according to a report from the World Bank. These sources are all either points of dispute between countries in the region, threatened by excessive use, or too costly to develop. As a result, the

countries of the Middle East continue to suffer from an acute lack of water security, which is defined as “the availability of an acceptable quantity and quality of water for health, livelihoods, ecosystems and production, coupled with an acceptable level of water-related risks to people, environments and economies.” In other words, achieving water security is not limited to maintaining high water reserves, but also involves taking into account productive and preventive initiatives to deal with water needs and related issues. Countries that underestimate the importance of water security are squandering opportunities for economic, political, and social prosperity for their citizens.

This is because water security is directly linked to food security, energy, and irrigation inefficiency. The lack of available water impacts agricultural land and leads to an excessive dependence on food imports to meet the demands of the population. The countries of the Arab World import between 30 and 35 percent of their food resources. Egypt and China are among the largest importers of wheat in the world, despite the fact that China’s population is ten times larger. The higher the national dependence on basic food imports, the greater the risk associated with turmoil in global markets. In this way, protecting national security and achieving stability becomes difficult if water and food security needs are not addressed.

This is not exaggeration or fear mongering, but rather a warning about one of the most severe threats facing the MENA region—I do not rule out the possibility of this becoming a cause or

justification for conflict—and a call for leaders to change policies. Policymakers can reach a solution to this crisis if there is political will.

For example, irrigation efficiency in the MENA region hovers at 50 percent, but if efficiency was raised to 70 percent through changes to policies and practices, huge benefits could be achieved. These include providing fifty billion cubic meters of water to the Middle East annually, which would allow countries to significantly increase grain production and work to find more sustainable ways to conserve water and produce food.

Water scarcity is a possible precursor to regional and potentially international conflict, and preemptive action must be taken to prevent this. Egypt, Ethiopia, and Sudan have been embroiled in a dispute related to water security and are striving to reach a consensual agreement in this regard that is both sustainable and implementable. The Nile River provides Egypt with 75 percent of its water needs, which are set to increase given population growth rates, and issues related to water security in the country are set to worsen. Ethiopia will soon begin the process of filling a lake connected to the Renaissance Dam, which is part of the largest hydroelectric power station in Africa. Egyptian anxiety and frustration at the slow pace of negotiations and the failure of talks thus far are made clear in Egypt’s public statements and talk about “red lines,” as well as in its seeking to call an international mediator to help resolve the dispute.

Another potential regional conflict lies in water disputes between Palestine

and Israel, even if the political conflict is resolved, which remains unlikely. Israel controls the head of the Jordan River, which restricts access to water for Palestinians, and aquifers are also under the control of the Israeli government. This leaves Palestinians with a limited amount of water. United Nations Development Programme reports indicate that Palestinians have access to about three hundred million cubic meters of water annually, while Israelis enjoy about two thousand million cubic meters. Such a disproportionate and

inequitable allocation of water resources sows the seeds of future conflict.

A sensitive and potentially dangerous issue like water insecurity in the MENA region requires sincere analysis and an honest warning about its possible impacts. If politicians, scientists, and economists work together to address water insecurity rather than ignoring the issue, we can prevent possible conflict over access to water in the region.

*Translated by Madeleine Hall*