

## **Redefining the Scope for Development Through a Creative Lens**

*“Creativity is just connecting things. When you ask creative people how they did something, they feel a little guilty because they didn't really do it, they just saw something. It seemed obvious to them after a while. That's because they were able to connect experiences they've had and synthesize new things” - Jason Putorti, entrepreneur*

How many of us actually see creativity in that light? Had it ever occurred to any of us that this kind of creativity might just be what Egypt needs right now, to become what it was and even more? A multidisciplinary approach to reform through creativity is what this essay is about. The current widespread outlook on how to make Egypt better is what inhibits this type of creativity. An obvious trend that is noticeable since the January Revolution is that all Egyptians are now becoming more patriotic and more involved with the nation's affairs. However, their patriotism is entirely political in form. Their visions for nation-wide evolution and the achievement of self-actualization are restrictively tied to politics, assuming that in order to reach those aspirations; political rights must first be attained. While according to Maslow's hierarchy of needs reaching self-actualization can only be done through a series of stages, the current mentality pertains that to do so, any Egyptian must become politically-oriented in their goals.

I strongly believe that an initiative with a broader spectrum, one like building green, would be a useful tool when implementing the type of creativity necessary for us to reach a state of true self-actualization. After winning the Business Plan Competition with Entrepreneurs Society, my passion for this project accumulated and I began to realize it's potential, along with the strong investor interest in such an idea. “Building green” stems from the idea of reusing waste from manufacturers for construction purposes. Specifically, this concept of building green could be applied through the use of marble and granite waste, resulting from the sediments' manufacture, to build using an independent kind of “green” construction brick. Shaq Al-Thu'ban, a well-known factory cluster in Cairo, is a prime area for this kind of scheme. Disposal costs of such waste are generally expensive, which is why the proper disposal of the waste hardly ever takes place. Instead, the waste is disposed of in public areas affecting Wadi Degla and Maadi protectorate (Hamza). Therefore, purchasing marble and granite waste at a very cheap cost would create a mutual benefit for all involved parties. For manufacturers of marble and granite, the process of getting rid of waste will be removed from their responsibilities. As for construction companies that want to build green, the raw materials for their manufacturing process can now be purchased at a much cheaper cost. And finally those who live in and near Shaq Al Thu'ban, will no longer be exposed to the health hazards that result from being in contact with such waste.

It is understood that using waste for production purposes is cheaper; lets break it down and understand why that is. A typical cement brick is made up of cement, fine sand, and aggregates. Recycled cement bricks however will replace most of the fine sand and all of the aggregates with marble and granite slurry waste and particles. Normally, the material cost of a 1000-batch of solid cement bricks (25 x 12 x 6 cm) is 184 LE. Replacing the traditional aforementioned raw materials for solid cement bricks with marble and granite waste, costs would be pushed down to 128 LE, which is approximately 30% cheaper (Salama). Another important point to mention is that Egypt's rapidly booming construction industry is expected to attract investments of around 7.3 billion

dollars by the year 2015. Even during the recession, construction activities continued to take place and increase, and more foreign companies and investors have been expressing interest in Egypt's powerful construction market (D-8 Secretariat). In light of the statistics showing growth and potential, Egypt is in dire need for the building green initiative. On the macroeconomic level, construction activities are still accelerating which means pushing costs down would lead to the general reduction in real estate prices. This will inevitably bring down the value of Egypt's basket of goods and services, hence stabilizing or hopefully reducing the inflation rate.

Building green will not only boost Egypt's economic development, but it will also alleviate our environment from some of the strain that we unconsciously place on it in our daily lives. Manufacturing "green bricks" would make use of the 60% waste that results from marble and granite production—waste that amounts to a staggering 1.28 million tons. This would eliminate the process of dumping this waste into nearby land water (Salama). The benefits of such resourcefulness present themselves in the prevention of many harmful effects brought about by waste dumping. The inorganic nature of marble and granite means that they do not decompose and so their negligent disposal can lead to "water clogging of the soil, increasing soil alkalinity, and disruption of photosynthesis and transpiration" (Hamza). Such hazardous environmental effects may seem trivial when mentioned in brief. Let us discuss them in depth in order to grasp their magnitude. High levels of soil alkalinity diminish the quality of our soil structure, limit the soil's infiltration capacity, and hence create a barrier for water seepage down into the soil. Consequently, rainwater then collects on the surface of the soil and impedes the agricultural potential of the land. The domino effect of harmful environmental implications doesn't stop there, the interruption of the natural process of photosynthesis is also an issue. The instability of photosynthesis means a widened ratio between carbon dioxide and oxygen, with the former being greater than the latter. This would create a bubble-like atmosphere for those living near such factory clusters, and eventually even those situated far away. With a well-needed future-based perspective, I believe building green has proven to be ideal. Implementing such an innovative ideology will open the doors for many similar changes through raising awareness for areas like Shaq Al-Thu'ban, which would eventually lead to the desired reform in the manufacturing sector. Shedding some light on such areas will not only help our environment in the future, but it also carries a social return for those living in such squatter areas. People will become aware of their daily difficulties and with the current trend in civic engagement, more people may be willing to contribute to taking the hills of waste off their land and homes, giving them a healthier environment to live and work in. This would be a way in which such a concept could induce social responsibility.

The construction and manufacturing industry is a very prosperous one, with a 12.5% annual growth rate (Salama). Building green would also rejuvenate the industry in terms of its stage in the product life cycle by bringing the new recycled construction industry into light. With the rate of growth in the traditional industry, one can only imagine the rapidity in growth once firms realize the "golden" opportunity that has been presented to them, through this concept of building green—with their main motive being cheaper costs and higher profit margins. In addition, the technological know-how is already available, meaning that there is no need for firms to reinvent the wheel, delivering more added benefits. These bricks would be the ultimate

option, in that they bring together eco-friendliness, increased awareness, and reduced costs and therefore prices.

As a business marketer, I am well aware of new and upcoming market trends. Corporate Social Responsibility (CSR) has become of growing importance to corporations, for its aid in the establishment of a sturdy reputation. It is therefore safe to assume that every business owner aims to fulfill their CSR with minimum cost structures. These green bricks grant construction builders a solution to their CSR requirement, whilst satisfying their cost and efficiency motives. Using global technology convergence to provide Egypt with the expertise for the manufacturing of eco-friendly bricks also serves as a form of CSR. To validate this argument, Rania Hamza, an environmental scientist, conducted tests on these particular recycled cement bricks in the American University in Cairo (AUC). Hamza's test results show that these bricks fulfill the requirements of the Egyptian code specifications as well as ASTM international specifications for structural bricks. The study conclusively shows that such recycled bricks are actually more successful than traditional bricks (Hamza). The fact that switching to the manufacture of green bricks serves the ultimate goal of any construction builder, gives it high potential in terms of marketability; ideally covering both environmental sustainability and cost. Typical bricks in the Egyptian market face a problem with positioning their brand distinctively. But because of these new recycled bricks, there is a new ability to position the brand in the market as one that will stand out and increase awareness about reusing waste.

My diverse academic and extra-curricular background has allowed me to implement the kind of creativity, which I believe our country needs. With interests in art, marketing, and entrepreneurship, I have managed to adopt the creativity needed to analyze and present this project. Ask me how I did it, and I'd feel guilty because I didn't really do it, I just saw it. Building green is an approach towards development, but one of a diverse nature. I strongly encourage that similar approaches would be used parallel to the outburst of political awareness for Egypt to really flourish. Simply put, building green helps cut costs because our economy needs it, lessens waste because our environment deserves it, and takes initiative to move towards development because our markets can realize it.

## Works Cited

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