

## 5. AVENUES FOR FUTURE RESEARCH

This paper does not propose this framework as a roadmap to bring about industrial ecology in Egypt. Egypt has its unique socio-cultural and socio-political characteristics which will necessitate locally-tailored framework for achieving industrial ecology that builds on existing institutional and regulatory settings. Ideas of good governance and participatory planning processes have faced difficulties in their application in Egypt, and, sometimes, proved unworkable. Their *immediate* and *full* application within the current context is doubtful. The lack of theorising upon the current process of founding industrial areas in Egypt adds to this difficulty/doubt.

Having said that, the conceptual framework, constructed in this study, is merely seen as *a starting point* for further research on how to bring about industrial ecology in Egypt. It stands as an initial structure to help initiate an empirical testing of Egypt's recent endeavours to incorporate sustainable development, and of possible problem solving scenarios. In more details, further empirical research, building on this conceptual framework, is needed to identify:

- The current process through which industrial zones in Egypt are founded, and whether the recent endeavours have made a real shift in practice.
- The influential factors which help give shape to this process and, hence, its outcomes, and the current obstacles which hinder the application of IE. It is these factors and obstacles that have to be dealt with towards a real shift to IE.
- Possible long-term, incremental and context-specific scenarios through which these factors could be changed and these obstacles could be overcome.

Apart from these possible research avenues, the framework could inform a scholarly as well as societal debate on how to set the context and plan for industrial ecology on the national, regional and local levels in Egypt.

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