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## **Guided Densification in Brazil versus Informal Compactness in Egypt: *Can Urban Management deliver the Sustainable City?***

*Extracted from R. Burgess and M. Jenks (eds) Compact Cities: Sustainable Urban Forms in Developing Countries, UK, Spon Press, 2000. (pp. 127-140).*

### **Introduction**

A recent study on urban densities in developing countries conducted for the 1996 United Nations Conference on Human Settlements, (Acioly and Davidson, 1996) concluded that there is no universal recipe for urban densities in terms of an ideal, or most appropriate density, and this was particularly the case for residential densities. Several case studies have shown that what is regarded as a high or a low density, and what is an acceptable density, differ between continents and countries, and even within cities and neighbourhoods. However, there was evidence that a general process of change was leading to more compact cities, though often in the face of considerable resistance. The study revealed that costs of low-density solutions are increasingly recognised. Case studies in Brazil and India showed that government policies, plans and development control instruments can shape cities and densities in a way which optimises infrastructure, municipal services, land and public resources (Acioly and Davidson, 1996; 1998).

Subsequent research in Cairo, triggered the idea for this chapter - a comparative analysis between the process of compaction in Egyptian cities and the process of densification found in selected Brazilian cities. The main objectives of the chapter are to analyse the different modes of densification; to highlight the advantages and disadvantages of densely occupied urban environments, and to assess their outcomes from the point of view of sustainable urban development.

In Egypt informal urbanisation and the illegal extension of buildings exacerbate the positive and negative effects of extreme compaction. This phenomenon is normally the result of a spontaneous process coupled with inadequate housing and urban policies. By contrast, the process in Brazil is steered by active and enabled local governments using a range of urban management instruments that result in physical compactness and the optimal use of infrastructure and land.

In the first part of this chapter the problems and opportunities presented by compact urban environments in Cairo and Giza are analysed. It reveals the particular ways in which informal development in Egypt leads to compactness, and attention is focused on various aspects of urban development such as urban vitality, social interaction, local economic development, transportation, air quality, congestion and spatial management. It is argued that the sustainability benefits of a compact city environment cannot be attained in the absence of guiding policies, urban management tools and a capable local government.

The second part of this chapter focuses on the experience of those Brazilian cities whose local governments are actively engaged in policies of urban intensification (guided densification) that lead to more compact urban environments (e.g. São Paulo, Curitiba, Porto Alegre). This is attained through the transfer of development rights to and from parcels situated in the existing built-up area, via shifts in land use zoning and floor area ratio (FAR), based on the principles of enablement and public-private negotiations. At times the transfer of

development rights (TDR) is used to preserve and reuse buildings with a recognised heritage importance. The densification policies are also used to generate public revenues targeted on infrastructure improvement programmes in poorer areas and social housing programmes. Physical compactness measures are also mechanisms for social justice. The article shows how this approach is becoming increasingly popular as a source of revenue generation and as a tool for redistribution, since it produces a financial surplus available for investment in needy areas of the city. The article suggests that an encouragement of compact city environments can provide an impulse to a different path of urban development than that of the dominant urban sprawl model.