

7TH ANNUAL CITY DEVELOPMENT CONFERENCE

- ENVISIONING CITIES OF THE FUTURE

SINGAPORE 19-21 NOVEMBER 2014

STREAM ONE: CITY REGENERATION AND URBAN PLANNING, 19 NOVEMBER 2014

TOPIC: PURPOSE PLANNED NEW COMMUNITIES – FRAMEWORKS AND CASE STUDIES

A presentation by Mark Windsor

Good afternoon.

The relevance and ultimate success of any urban planning endeavour is always founded on the strength of its strategic understanding, its Vision and its market positioning.

HIGH LEVEL STRATEGIC ISSUES FOR SUSTAINABLE CITIES

I would like to commence with a few humble thoughts on high level strategic issues that are relevant to the future sustainability of cities.

First are the effects in many countries of **rapid population growth**. Population growth rates are unsustainable. Currently the world's 7 billion people are consuming 50% more resources than the Earth is producing. Surely over-population issues are as pressing as carbon emissions and global warming.

Second is the looming **global freshwater crisis**. Because of accelerating global population growth, it is predicted that parts of the world could see a supply-demand gap of up to 65% in water resources by 2030. Currently, almost 1 billion people do not have access to clean water.

In a world rife with political and military powder kegs, the most ominous is in Kashmir on the India-Pakistan border. The Indus River, which rises in India, provides Pakistan with 90% of its fresh water. In 1960, the Indus Water Treaty was agreed between Pakistan and India. In 1960, Pakistan had a population 45 million, which today is 178 million. In 1960 India had a population of 448 million which today is 1.2 billion, and India has a voracious appetite for hydroelectric power and irrigation water which is threatening river flows to Pakistan.

Elsewhere in cities and agricultural regions across the world, groundwater reserves are becoming precariously depleted.

Water conservation measures have their place, however financial and political incentives in conjunction with current technology innovations including new graphene⁽¹⁾ membranes, will surely lead to revolutionary breakthroughs in desalination.

Third is the **rural exodus** of populations to existing major urban centres, continually driving the growth of megacities - with attendant pollution concentration and economic inefficiencies associated with retrospectively fitted transport, utility services and social infrastructure. This phenomenon is most pronounced in heavily populated, economically developing countries - which in Asia include: China, India, Indonesia, Bangladesh, Philippines and Vietnam.

⁽¹⁾ The revolutionary properties of graphene were announced subsequent to the Conference in an article of 30 November 2014 in The Independent which can be accessed online [here](#).

Fourth is the **digital communications revolution**. In a remarkably short space of time, people are shifting from social interactions within fixed spaces at given times; to digital cyberspace communications and transactions which can be made at any location, at whatever time, and in any surroundings.

A traditional “reason for being of cities” was to facilitate efficient exchange of goods, services and ideas - however modern communication technologies as well as rapid local, regional and international travel options are diminishing the validity of this traditional driver of city development.

Patterns are emerging in some segments of society for whom the choice of a desirable place of abode, over-rides the necessity of former times to live near a physical place of work. However, in spite of predictions to the contrary, this phenomenon does not yet seem to be hollowing out city centres – at least not in Asia and in Australia with which we are most familiar.

In Australia, major cities are becoming more vibrant and higher density living is more generally accepted by new generations, and even preferred to the suburban lifestyles of their parents. As in Asia, higher density living is in part driven by affordability imperatives, but also by social and lifestyle factors including dual incomes, fewer children, single parents, single persons, retirees, the desire for shorter commuting times, convenient access to child day care, less cooking at home, etc. Meanwhile, many country towns face crises of economic and social viability with diminishing populations and the loss of key service providers such as doctors and teachers.

Fifth is **tourism**. Big cities with populations of affluence or growing affluence, combined with highly affordable, convenient and fast travel options, are generating huge opportunities for locations beyond the major urban centres to reinvent or supplement their economic sustainability with tourism.

Sixth (and final for the purpose of this presentation), are the global **imperatives for economically, environmentally and socially sustainable development** - meeting the needs of the present without compromising the ability of future generations to meet their own needs. In a fragile planetary eco-system, component targets for a sustainable city include carbon neutrality; economic sources of renewable energy; zero waste; social inclusiveness and cohesion; and resolution of spatial tensions between the City, its suburbs and the countryside.

Historically, cities were incubated in locations that were strategic - featuring some or all of the following attributes:

- Fresh water supply;
- Fertile agricultural hinterlands or fisheries;
- Transport accessibility generally, and to trade routes in particular – by land, river or the sea; and
- Military defensibility.

Looking to the future, I would like to offer the following strategic hypotheses for investment in the development of new cities by public and private sectors.

1. Revolutionary new desalination technologies, capable of producing gigalitres daily of potable and agriculture irrigation water for millions of people, will greatly incentivise new city developments close to the sea, ideally in locations with safe navigable access and which do not consume productive agricultural land.

2. Pressures within existing large cities, especially megacities, for more sustainable development and improved qualities of lifestyle can incentivise the development of new satellite cities, planned to embody all the attributes of sustainability. These cities must be located and designed to strategically fit their particular physical, environmental and market positioning circumstances, in order to ensure economic viability. In some circumstances, the “reason for being” of new communities may relate to value adding-agricultural activities with strategic linkages to major cities.

For example, it is surely sensible to relieve population pressures on cities like Jakarta by building new cities to accommodate, train and employ rural emigrants closer to their home villages.

3. Freedom from “place” constraints, made available by digital communication technologies, in combination with desirable abodes offering high qualities of lifestyle, can be population magnets for state-of-the-art development of new greenfield cities, and for the expansion or renewal of existing settlements.
4. The viability of urban centres which are separated from major cities can be significantly supplemented by tourism - leveraging off their attractive attributes. These urban centres could be agriculturally based in rural settings within convenient reach of major cities by private or public transport - providing short “escape to the country” getaways for city-bound residents; or they could be other national or international destinations with attractive features but with limited revenue generating opportunities.

I believe that a combination of the aforementioned factors will leverage opportunities to revitalise settlements within the countryside with new cities planned for sustainability and offering lifestyles attractive to some segments of the total population - which with advances in agricultural production will mitigate the rural exodus phenomenon.

It is imperative that Strategic Plans and Master Plans for existing and new cities define city boundaries – the line at which spatial growth of the City will encounter its limits and is concluded. Areas beyond the boundaries are protected green spaces accommodating recreational parks, wooded areas to be retained or established, and agriculture.

BACKGROUND AND CASE STUDIES