**MANAGING URBANIZATION IN SRI LANKA:**

**The Need for a Science-based Approach** 3,880 words

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**Abstract**

Urbanization through rural-urban migration was associated with industrialization

in 19th Century Europe and those countries did experience economic growth.

Later, the prolonged mechanization of agriculture in some of those countries also

provided a further impetus to urbanization in their respective populations. Thus,

economic growth has come to be closely associated in the West with urbanization.

However, the conditions that generated urbanization in the West were not

necessarily the same as those that are causing urbanization in the low and middle

income countries (LMICs) today. Furthermore, the colonial impact did cause some

urbanization in the LMICs but the prosperity it generated was inequitable.

There was a spatial planning approach that arose in the late 19th century to deal

with urbanization in England during their industrialization - a visionary ‘utopian’

concept that gained credence and popularity in the West. That is almost the only

approach in current use in South Asia. While appropriate in earlier Western contexts,

its relevance to the LMICs today needs to be questioned. The scale of urbanization

in South Asia today is much greater in magnitude than its manifestation earlier in

the West. Furthermore, the impacts upon LMICs of on-going globalization, scientific

developments and technological innovations including those of ICT need also to

be taken into account now. Thus, the spatial planning approaches required in

South Asia and discussed in the paper, strive to be science-based and consequently

are different to the popular approaches based on those taken earlier in the West.

**Introduction**

The last quarter of the Twentieth Century brought into prominence three important global

realities. The first was about the severity and worsening state of the earth’s bio-physical

environment. The second concerned a process which is now generally referred to as

“globalization”. The third reality had to do with the rapidity of urbanization currently

taking place with particular intensity in the Low and Middle Income Countries (LMICs).

Thus it has come about that current and future development work in these countries should

take cognizance of these realities. Most of the LMICs have little control over the first two

realities.

The scale and pace of current urbanization is recognized as being unprecedented in human

history. Urbanization and its consequences are most prominently manifest today in the

LMICs. *The Global Network of Science Academies* (IAP) recently placed population growth

coupled with unplanned urbanization among the ten most serious global concerns. That

important apex body of worldwide scientific institutions identified the necessity to develop

and implement urban planning policies that internalize consumption needs and demographic

trends to reap the benefits of sustainable urban living (IAP, 2012).

The gravity of urbanization and its impact on human habitat in the LMICs had been

anticipated even in the 1960s by a few eminent scholars and a landmark book was published

on the subject (Abrams, 1964). A UN agency predicted that during the period 1990-2020

the bulk of the world’s population will be urbanized; that Asian cities alone will contain

more than half that population; and that this will mean 1.5 billion people will be added

to the urban centers of Asia (ESCAP, 1993). Despite considerable efforts to confront the

adversities of urbanization, the LMICs have seen no breakthroughs.

This paper is based on a review of the planning literature covering the origins, the growth

and the development of those concepts and theories which have already had, or could

have an influence in dealing with urbanization in the LMICs (Gunaratna, 2014).

**The Nature of the Problem**

The rapid growth of urban populations in the LMICs is the result of natural increase and

also, importantly, rural migrations to cities. These migrations are a consequence of extreme

rural poverty coupled with the very poor access that most of these rural folk have to basic

needs and social infrastructure in most LMICs. The entire urbanization process is seen by

some scholars as one that helps the emancipation of under-privileged rural migrants and

also supports economic growth through the provision of labor for industrial production.

The migratory targets of urbanization in these countries are usually those larger urban

areas which already are, or likely to become, *‘megacities’*. The fact however is that rural

migrants also face serious problems even in their eventual urban destinations. These include

the inadequacy of shelter, access to basic services and appropriate unskilled employment

opportunities. They, by their increasingly large urban presence, cause severe and unabated

stresses on the limited infrastructure facilities available to other city dwellers. Consequent to

this type of urbanization, substantial and seemingly insoluble problems must be anticipated

within these cities, if not already present in considerable measure.

Many planners grappling with urbanization issues in the LMICs do not confront the subject

directly and in its entirety. They focus their attention only on its resultant urban impacts

which are within the affected cities themselves. Some of the typical theoretical writings which

support such limited actions tend to lay stress upon the urgent need for “radical planning”

to support participation by often large, disenfranchised segments of urban and urbanizing

populations. This focus was seen, for example, in the discussions: on squatter settlements in

Latin America (Turner & Fichter, 1972); more recently; on anti-eviction campaigns within the

Western Cape in South Africa (Miraftab, 2009); and, still more recently on the “stubborn

realities” of informal settlements in the global south (Watson, 2012).

Even when dealing directly with urbanization, reliance is invariably placed on intra-urban

interventions through the various professional disciplines concerned with urban planning.

The solutions are consequently and inevitably based upon guiding the expansion of

impacted cities in one way or other, often involving the planning and building of satellite

towns in the vicinity of those cities. The predominant intellectual material which underpins

the attempts to manage urbanization in this particular manner originated in the West more

than a century ago.

Rural out-migration impacts not only upon cities that receive the migrants but also upon the

rural hinterlands they left behind. It does so quite adversely in that agriculture is increasingly

deprived of manpower and thus subject to continuing neglect. There are also studies which

strive to predict the consequences of horizontal urban expansions due to rapid urbanization

and their likely spatial impact on rural land. The main prediction in one such recent study

which was based on the assumption of continuing current trends, suggests the tripling of

urban land cover worldwide within the next three decades with a notably adverse impact

upon biodiversity (Seto *et al*., 2012). That study also indicated that the main biodiversity

‘hotspots’ likely to be affected by these trends are in the LMICs with many being in South

Asia.

**Urbanization and South Asia**

There were 23 very large cities worldwide in 2011, each with more than 10 million people.

Asia had 12 with South Asia alone having 5 of these ‘megacities’. Three of them were in

India, one in Pakistan and one in Bangladesh. The South Asian total is predicted to increase

from 5 to 8 megacities by 2025 (UN, 2012). The urban populations and urbanization rates

are given in Table 1.

**Table 1 – Urban populations and Urbanization rates**

**Country Urban Population Rate of Urbanization (%)**

Bangladesh 44,685,923 (28.4% of total) 2.96

India 391,535,019 (31.3% of total) 2.47

Nepal 4,762,848 (16.2% of total) 3.62

Pakistan 65,481,587 (36.2% of total) 2.68

Sri Lanka 3,092,255 (15.1% of total) 1.36

*Sources*: Urban population figures: World Bank staff estimates for 2012;

Urbanization rates: CIA World Factbook estimates for 2010-2015

According to these estimates, Sri Lanka and Nepal have low proportions of urban

populations, these being respectively 15.1% and 16.2%, as compared to 31.3% in India.

There is however a real possibility that Sri Lanka’s and Nepal’s urban populations have been

underestimated due to the earlier official geographic delineation of urban areas in the two

countries. Nevertheless, urbanization within these two countries could indeed become a

pressing problem in the near future.

Indigenous South Asian coverage of urbanization in its demographic aspects and urban

socioeconomic impacts is extensive and very competent. These studies reveal that the larger

urban areas receive far more rural migrants, with the largest cities gaining the bulk. The South

Asian megacities experience immense difficulties. Many scholars are seriously concerned

that the often illiterate and unskilled rural families who gravitate to large cities to escape

rural poverty, eventually become trapped in squalid and insanitary urban environments of

deprivation, malnutrition and endemic disease; that their sheer numbers cause un-relievable

stresses on scarce urban infrastructure and services; and, that those cities cannot generate

employment opportunities to sustain the massive and continuing influx of migrants. Thus,

these megacities with their inevitable slums are becoming increasingly unmanageable and

unsustainable.

In discussing a paper presented by an invited participant (Ul Haque, 2014) at an important

symposium, the editor of the published proceedings states that: *“Pakistani cities have long*

*been a story of sprawl. A precedent was set in the 1960s, when the new city of Islamabad*

*was built with a “garden city” approach—one that emphasizes low-rise suburbs and large*

*residential housing facilities. It is a model that discourages downtown development, high-rise*

*buildings, services (from retail stores to libraries), and even office facilities—and it remains*

*the prevailing paradigm of urban planning today”* (Kugelman, 2014).

**Urbanization and Sri Lanka**

With low urbanization in the past, most scholars in Sri Lanka have hitherto not seen

the subject as worthy of much attention in our context. There are also some important

misconceptions found in the media, both favorable and unfavorable to urbanization. It

seems necessary therefore to clarify at least one important misconception. It concerns the

relationship between urbanization and economic growth. Although high growth in per

capita GDP is associated with high urbanization in the West and in some LMICs, it is incorrect

to assume a very direct causal relationship between them. For it is far more likely that the

comparatively high levels of poverty, inadequate access to social infrastructure facilities and

prevalent realities in the rural sectors of most LMICs, are perhaps the real causes of ruralurban

migration. Urbanization needs to be seen as the result of sharp differentials in living

standards, income levels and the availability of opportunities for the youth that often exist

between the rural and urban sectors. The view that urbanization can become a driver of

growth has to be clarified and contradicted. The blinkered pursuit of economic growth by

increasing GDP per capita without at least an equal concern for inclusive growth, equity

and distributive social justice, may be seen as one of the main drivers of high urbanization.

**Urbanization and Colombo**

The statistics indicate that in most LMICs urbanization is directed mainly to the larger urban

centers. In each of the smaller LMICs, only one city, usually the commercial capital city

is impacted by urbanization. Historically, it is Colombo that has grown by urbanization

although for many decades that growth has been slow. Nevertheless, Colombo already

has its share of slums. With the military victory over the separatist terrorists in mid-2009

which brought to an end a 30-year war, the circumstances have begun to change. The more

recent investments in Colombo’s infrastructure, the beautification of the city and recent

ongoing concerns to prepare and implement a comprehensive plan for the city are indeed

welcome. These and the proposal to make a massive investment on a plan to extend the

central business district of Colombo into the sea will, if successfully implemented, bring

about higher economic growth. However, these efforts could cause the city of Colombo to

be impacted by urbanization on a scale hitherto unknown.

**The Theories**

The study being presented below is based upon an earlier review of planning literature

about the origins and development of the concepts and theories which have influenced

or are relevant to urbanization in the LMICs (Gunaratna, 2014). It will not be within the

scope of this paper to discuss in detail these theories except to briefly mention those that are

irrelevant to us and those that are likely to be more relevant.

The earlier review revealed that there are basically two very different sets of theories: the

first being a set of utopian concepts from late 19th century Britain and early 20th century

Continental Europe which form the basis of most current planning approaches adopted in

South Asia; and the second, a set of more scientifically rigorous theories, some of which

could underlie a far more relevant approach to the problems of urbanization in the LMICs.

The latter theories, also of Western origin, are an integral part of the sub-discipline generally

known as Spatial Economics.

**The Utopian Concepts**

The particular solutions based on utopian concepts were intended to guide the expansion of

impacted cities. The intellectual underpinnings are British from a century ago. The resulting

models which involve ‘satellite towns’ are still being used to deal with urbanization in the

South Asian region. There is an obvious question of their relevance. The scale of current

urbanization in the Indian sub-continent is of a different order of magnitude from its

manifestation in Britain where this particular utopian concept was first envisioned. This is

clear when one notes that the total urban population of England and Wales in 1901 was

**25.1 million** (Hicks and Allen, 1999). The current urban population of India **grows by**

**double that figure every 5 years**.

A well-known Indian researcher discussing the development of *Navi Mumbai* (“New

Bombay”) which is the latest of Mumbai’s satellite towns, observed that:

*“In the 1960s and 1970s, Asian urban development policies centered on*

*slowing down the rate of urbanization…. Satellite towns…have been among*

*the most widely adopted means to achieve this. However,…*(they) *have*

*proved to be ineffectual…The development of New Bombay is a reflection*

*of many of the problems that have beset satellite-town building in Asia.”*

(Shaw, 1995)

**Theories from Spatial Economics**

Growth Centre Models

Again, it is not possible to discuss these theories in detail here except to say that some are

more relevant to development work in the LMICs than others. The intrusion of Economic

Growth Theory took place immediately following World War II, intended to help rebuild

war ravaged Europe. With this effort underway, the theory was adopted and applied to

the LMICs beginning around 1951. It influenced spatial planning through several ‘growth

centre’ models which became popular. These models proposed that capital investment for

economic growth of a lagging region should be made in large concentrations at a few pre-

selected geographic points. The assumption was that development would then result and

spread from these points. A‘Growth Corridor’ is an extension of this approach where a

series of so-called ‘growth centres’ are linked together by transport facilities.

Unfavorable scholarly reactions based on strong evidence against such Growth Centre

models of the 1950s began to appear in the late 1970s and early 1980s. Consequently,

an important Indian research project (Roy, Patil, 1977: 6) rejected the concept as being

irrelevant to rural and regional development in India, favouring instead what was a very

different concept called the ‘service centre’. In this concept the centre would be endowed

with social and economic infrastructure to serve its rural hinterland.

A school of thought traceable to Boake (1953) saw a LMIC’s economy as being a duality

consisting of: a backward, tradition-bound agriculture sector on the one hand where

capitalism is not indigenous and therefore retarded; and, on the other hand, a small,

urban industrial sector, where capitalism has been imported full-blown from the West. A

fundamental belief behind this theory was that urbanization is essentially a beneficent process;

and, that migration to cities is an appropriate and satisfactory process of emancipation from

poverty and ignorance for rural folk in the LMICs. The roots of this belief are to be found

in the cultural alienation of Western scholars and Westernized urban elites from indigenous

culture among rural populations. This theory should not be considered with favour today.

A set of Different Theories

Another but very different set of theories which arise from Spatial Economics can be

considered in a much better light today. They have a lineage beginning with the work of

Von Thunen (1823), which can be seen now as the origin of a scientifically rigorous German

school of thought.

A few other scholars have studied the relationship between the ‘rank’ and ‘size’ of towns

within any country, where rank refers to hierarchical order in the size of towns and is

determined by the numbers of urban residents. These studies have a lineage starting from

the work published by Jefferson in1936 and have originated in and been developed within

the US. They suggest two very distinct patterns where rank and size are closely correlated in

a very regular and predictable manner. In the other pattern, the largest city predominates

very substantially in size over the next in rank. The latter pattern is said to display ‘primacy’

and the first ranking urban place is called a ‘primate city’. The usefulness of these studies is

two-fold: they focused more light on the existence of the pattern of primacy within many

LMICs; and suggested a causal relationship between primacy and the economic conditions

residual from a history of colonial subjugation.

A Latin American scholar, Frank (1969) also sought to establish a causal link between

colonialism and the condition of underdevelopment. He explained the process by which the

urban configurations of most LMICs became highly skewed structures. The skewing process

he attributed to the military and economic agencies of the respective colonial periods of

those countries. His views are well recognized today. A UN publication states: *“…many*

*developing countries are characterized by a so-called dendritic market system, which is the*

*legacy of a colonial past and/or of persisting international dependency relations...”* (UN/

ESCAP, 1979:58)

There are now many Western scholars (starting with Johnson in 1970) who have

understood: that a national urban system with a skewed dendritic market structure left

behind as a colonial legacy in an LMICs has little utility for national development; that

market forces alone cannot be expected to alter a skewed national urban system; and, that

some intervention at the national policy level is needed to free an LMIC from this particular

colonially derived structural constraint.

Small and Mid-sized Towns

A well-founded approach originating in South Asia from a Seminar held in Kathmandu in

1978 bearing a strong spatial content has since begun to gain much support. Thereafter two

subsequent papers appeared in the West. In the first, the author, Rondinelli (1986) states:

that colonial economic policies reinforced by post-colonial economic growth strategies of

the 1950s and 1960s were major causes of the rapid growth of a few primate cities to

extraordinary size in most Asian countries; that the emphasis was on developing urban

industry over rural development; that the distributional effects and the spatial implications

of investment allocation were largely ignored; that although the effort was to modernize

the metropolitan economy, rural regions were neglected and left poor and underdeveloped;

and also, that in countries with dominant primate cities, few secondary mid-sized cities could

grow large enough and have sufficiently diversified economies to attract rural migrants,

stimulate agricultural economies and promote regional development.

The second paper also justifies the development of small and intermediate urban places. The

authors, Hardoy and Satterthwaite (1988) have based their recommendations on reviews

of over 100 empirical studies across the LMICs and a large number of national programs

for small and intermediate towns. According to them, spatial programs *“*.*..can be a crucial*

*component in attaining social and economic objectives such as increasing the…populations*

*reached by basic services; increasing and diversifying agricultural production; and increasing*

*the influence of citizens living in sub-national and sub-regional political and administration*

*units...”*

A UN publication (ESCAP, 1979: 87) provides some valuable observations and general

conclusions for the Asia Pacific regional context. It proceeds to state: that urban-rural

inequality is a major problem in the region; that the disparities in respect of services,

income earning opportunities and wage rates have caused concern; that many governments

in the region should pay more attention to rural development to achieve a more balanced

growth spatially and between rural and urban areas and a more equitable distribution of

the benefits of national development and economic growth.

Even assuming a committed approach to rural development, out-migration from rural

areas for non-farm occupations may be expected to continue, though on a reduced scale.

Rather than have rural migrants target the larger cities, the more manageable and preferred

scenario would be where they move to the small and mid-sized towns. Then, movements

to the large cities would be confined to migrants from mid-sized towns. This pattern of

internal migration is sometimes referred to as “decentralized urbanization” (Sharma, 2003.

10.6, 410). It has to be noted that urban-based services in small and mid-sized towns not

only require built urban-type infrastructure but also that people with special urban-type

skills are available and resident. As such skills are not readily available, a proactive planned

urban settlement program to provide these skills from major urban areas to the S&M towns

is a clear need (Gunaratna, 2000).

**Conclusions**

Inter-urban configurations, especially in many of the smaller LMICs, were formed in response

to the needs of their respective colonial economies. They are seen today as being peculiar

in two ways: the predominance of a single ‘Primate City’ over all other urban places; and,

the highly skewed pattern of their respective inter-urban configurations. In these respects,

Sri Lanka is typical of such LMICs. Post- colonial development efforts, even if effective

in generating high economic growth, but made within the framework of such colonially

derived spatial structures, will benefit mainly the urban elites based in the respective Primate

Cities. They will surely accentuate income inequalities across the respective countries.

Readjusting a distorted inter-urban spatial structure towards current development needs,

involves mainly the creation of small and mid-sized towns in carefully selected locations

relevant to post-colonial development strategies. If the old inter-urban spatial structures

are not re-adjusted to respond to the new development thrusts and those efforts are

focused only on the respective Primate Cities, rural-urban migration will be exacerbated.

Thus, already prevalent income disparities across these countries will be accentuated and

the formation and consolidation of slums and shanties will inevitably result. They will

become an increasing part of the built environment of Primate Cities. Such happenings are

clearly evident in most LMICs. Continued growth in this manner with mounting adverse

environmental consequences can then give rise to diseconomies of scale resulting even in

the flight of investments needed to drive further growth.

In the past seven decades, we in Sri Lanka have had three comprehensive plans prepared for

the Colombo Region. The Gal Oya project took precedence over the first. The Mahaweli

Project over-shadowed and pre-empted investment in the second. General Elections and a

change of government intervened in the case of the third. Thus all three planning efforts

were each superseded, one by one, with the passage of time. A new plan for the Colombo

Region especially with political will behind it, as appears to be the case today, is most

welcome. However, it has to be recognized that all megacities in the LMICs have very high

rural-urban migrations. They consequently become infested with massive, unhygienic slums

and shanties giving rise to unmanageable social and environmental problems.

An important conclusion to be drawn is that the impact upon LMICs of the on-going

globalization and popularization of scientific developments and technological innovations

particularly in ICT needs to be recognized. These are surely altering the prevalent spatial

landscapes of industrialization in the West. Thus, it must be expected that the spatial

landscapes of most LMICs and certainly those of the South Asian countries will need to be

very different from those that emerged with 19th Century industrialization and urbanization

in the West.

There may be better chances of success with urbanization in Sri Lanka because we have

so far been insulated to a great extent from the adverse consequences of high rural-urban

migration. For this, we must thank the wisdom of our political leadership of the 1930s. The

impetus they gave to irrigation and re-settlement of the dry zone which forms two-thirds of

the total land mass of the island, domestic food production, and, rural development through

free education and an emphasis on preventive health care. Despite this initial advantage,

a megacity in Sri Lanka created by high rural-urban migration could still suffer the same

fate as elsewhere unless special precautions are taken. The precautions are that planning

and implementation work should be based on practices backed by scientific knowledge.

This work should carefully avoid concepts and theories found to be irrelevant or faulty.

Finally for ultimate success, it is necessary that we ourselves should deliberate, define and

decide upon an urbanization policy framework. It must also be done within the ambit

of an environmentally predicated national spatial policy, which we already have through

concerted professional efforts made over more than a decade.

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