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Moderating urbanization and managing growth: How can Colombo prevent the emerging chaos?

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Working Paper No. 2010/64

Moderating Urbanization and Managing Growth

How Can Colombo Prevent the Emerging Chaos?

Ranjith Dayaratne*

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Abstract

This paper examines urbanization trends, the growth of Colombo and its present state of development. It looks at the approaches to the planned interventions in the city and demonstrates how a uni-directional urban development has had a detrimental impact upon healthy growth and quality of life in a city where half of the population still live in slums and shanties. It shows that the city has been promoting high impact 'vertical growth' and argues that in the absence of healthy 'lateral growth', Colombo is unlikely to achieve its vision of creating a gracious city. It is based on the premise that growth and development of a city need to be managed in such a way that the quality of spaces and places are retained, accentuating their intrinsic characteristics, promoting social cohesion and enhancing liveability. The paper argues that urban development in Colombo must balance vertical and lateral growth and proposes possible directions of change in managing urbanization and development.

Keywords: Colombo, urban development, managing urbanization, planning, housing, squatter settlements, place, lateral growth

JEL classification: O20, O21, N95

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Acronyms

CMC Colombo Municipal Council

CMR Colombo Metropolitan Region

GCEC Greater Colombo Economic Commission

MHP Million Housing Programme

REEL Real Estate Exchange Ltd

UDA Urban Development Authority

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1 Introduction

Up until independence from Britain in 1948, Colombo as the modern capital of Sri Lanka had evolved into a pleasant garden city, although a number of derelict housing areas had also emerged in its periphery. However, having been a model city, the likes of which Singapore is claimed to have aspired to become in the 1950s, Colombo has steadily descended to a city plagued with over crowding, ad hoc development and failing infrastructure. Its problems of slums and shanties, derelict buildings, endless traffic congestions and increasing pollution are smoke-screened by the multi-storey office blocks, five star hotels and the genteel luxury residential towers that dot the urban landscape. With half of the population still living in slums and shanties, Colombo cannot claim to be the proud modern capital of a country that has 5000 years of civilized history and great ancient cities. At the time of independence, however, Colombo stood as an aspiring third-world city with great potential to succeed. Unfortunately, decades of uni-directional urbanization has endowed it with an unmanaged growth, spatial chaos and an increasingly poor quality of life, despite a number of planned interventions, enormous amounts of investments and experimentations with progressive housing development.

2 Colombo's past: from a trading post to a capital

Situated on the west coast of Sri Lanka, Colombo evolved into a capital city from a small trading post of merchants from Arabia, Morocco and Persia who arrived on the island by the eighth century. Next was the Portuguese occupation in 1505, followed by the Dutch and the British occupations in the eighteen and nineteenth centuries (Perera 1998). Since the establishment of the city as a node in the international trade network, first, of the Dutch and then the British Empire, Colombo has become both the commercial and administrative centre of Sri Lanka to the detriment of other cities. In fact, its centrality and magnetism have ensured that no other city in Sri Lanka has grown as much or poses a competitive challenge.

Colombo Municipal Council (CMC), formed in 1865, has overseen the transformation from its early stages to a capital city as well as its present downfall, although the main developer is not the CMC itself. Active agents of change have been the squatters on government land, and the inflow of migrants to the city both as menial trade workers as well as Tamil refugees from the north. Along with the CMC, a number of state agencies overseeing the development of the Island are also located in the city and have jurisdiction over its land. Since 1977, the Urban Development Authority and the National Housing Development Authority have been represented in CMC, while the newly-established Colombo Provincial Council has also assumed a major role since 1987 in managing the city's growth and directing development.

2.1 Planned interventions and expansions

Colombo can be considered a planned city. In fact, there have been five planned interventions during the years 1921 to 1996: (i) Patrice Giddes Plan of 1921, (ii) Patrick Abercombie Plan of 1948, (iii) Colombo Master Plan of 1978 sponsored by UNDP, (iv) City of Colombo Development Plan of 1985, and finally the Colombo Metropolitan Regional Structure Plan of 1996.

Patrice Gidde's Plan of 1921, covering the area strictly within the Colombo city boundaries, envisioned a garden city, the creation of which was persuasively put into practice soon after. The Abercrombie Plan, however, sought to locate economic, trade and port related activities within the city, extending those already in operation. It was perhaps this scheme that firmly established the tendency to centralize, and was seen as a negative direction. As a result, although some parts of the city have acquired the most cherished characteristics of Colombo such as the shaded and tree-lined streets like the *Bauddhaloka Mawata*, many areas evolved with a dense industrial spatiality, which became derelict brown fields later. In 1948, Patrick Abercrombie enlarged the plan, extending it beyond the city boundaries to Moratuwa in the south, Ja-Ela in the north, and 14 miles eastwards, covering a total area of 220 sq. miles. The idea was to rectify the weaknesses of Gidde's plan, thus creating satellite towns as growth poles in Ratmalana in the south, Homagama in the east and Ragama in the north. These were considered to be the means of decentralizing trade and commerce by distancing the concentration of development from the city. Abercrombie's plan, based on the concept of zoning, particularly recommended specific usages and densities for the various zones developed.

The UNDP sponsored Colombo Master Plan encompassed the Colombo Metropolitan Regional Structure Plan and the Colombo Urban Area Plan. These expanded into a large region on the outer periphery of the city, covering the entire Colombo District and included towns such as Kalutara and Gampaha. The centre, the periphery and the outer region were all considered together and a balanced spatial development was envisaged. In fact, towns in the periphery and outer regions were created as nuclei in order to moderate the excessive concentration of development in the centre and to disburse it over a larger area. To achieve this aim, special projects such as the *Katunayake* Investment Zone were created. The most significant among these was the establishment of Kotte—Sri Jayawardanapura as an administrative capital in order to move governmental activities away from Colombo and allow it to develop as the country's commercial capital, although it eventually failed. The Urban Development Authority (UDA) was established to guide the island's urbanization while the Greater Colombo Economic Commission (GCEC) was set up to promote and guide the economic activities in the Colombo region.

In tandem with the Colombo Master Plan, UDA produced the City of Colombo Development Plan that stipulated most of the zoning restrictions and building regulations. Initially these were strictly imposed but often modified later. A few mega projects such as the Courts Complex in the city, Parliament in the periphery and the Industrial Production Zone in Katunayake in the outer periphery were the outcome of this development plan, but it had no significant impact on the development pattern of the city that stretched along the two main arteries: Galle Road and High Level Road. The Colombo Metropolitan Regional Structure Plan produced in 1996 by the UDA, on the other hand, extended its reach beyond all earlier boundaries and engulfed the entire Western Province. Indeed, by including three large districts (namely Colombo, Kalutara and Gampaha), this expansion demolished the conceptualization of Colombo as a single city, enlarging it to an entire region while concretizing the centrality of the city itself.

The Colombo Metropolitan Region (CMR) is premised on a noble vision and laudable principles. Its core area plan envisages the creation of Colombo as a 'gracious city' aspiring to become the 'centre of national development' and the 'centre of commercial and financial hub of South Asia'. Principled on 'sustainable development', CMR utilizes an environmental sensitivity analysis as its key strategy in dealing with developmental

issues. Having taken into account the urbanization processes of the past, CMR has recognized seven urban agglomerations (the peripheral towns of Negombo, Gampaha, Biyagama, Homagama, Horana and Matugama) that can be employed to promote growth and act as development centres (UDA-CMR Structure Plan). These have been networked into the core area (the city of Colombo) and once again Colombo's centrality has been re-configured without any reservations through this proposal. The idea of shifting the administrative capital was abandoned, its failure acknowledged. Consequently, the administrative and financial core of the entire CMR was designated as the City of Colombo. Dubbed as the Capital Territory, this was indeed a tall order for Colombo, which was already faced with overgrowth, environmental downfall, and overcrowded high density spatial development.

3 Urbanization in Sri Lanka: the centrality of Colombo

As Sevanatha (2000) aptly describes, the most urbanized parts of the country today are centred on Colombo and cover almost three districts in the Western Province. This area is defined by the Colombo Metropolitan Regional Structure Plan as the Colombo Metropolitan Region (CMR Structure Plan). It enjoys more economic opportunities and has much better social infrastructure than elsewhere on the island. It has attracted most of the administrative and financial institutions, drawn by the presence of the sea port, the airport and other facilities. In fact, Sevanatha (2000) shows that 'CMR accounts for 80 per cent of all industrial establishments, 53 per cent of industrial employment and 31 per cent of total employment in the country while contributing 44 per cent to Sri Lanka's GDP'. However, CMR is not one composite entity but is comprised of three municipal councils; namely Colombo, Sri Jayawardenepura Kotte, and Dehiwala Mt. Lavinia, previously grouped together as the Greater Colombo Region. Although there are distinct advantages to this development, the population, land and service profile of the region show no indication of a prospering urban place (see Table 1).

A number of significant observations can be made from the table: with a population of 800,000 living in a land area of 3,731 hectares, Colombo is, indeed, a medium-sized city compared to many of the large cities of the modern world. It is also noteworthy that only 49 per cent of the dwellings are permanent, and the rest are slums, old settlements and shanties. With 40,861 dwellings fronting approximately 400 Kilometres of roads, its average house frontage is a mere 5-6 metres; an indication of a very high density indeed.

Table 1
City of Colombo and Greater Colombo Region

	Colombo City	Greater Colombo Region
Extent of area	3,731 hectares	7,555 hectares (75.55 sq.km)
Residential population, 1998	800,637	1,168,886
Floating population, 1998	400,000	600,000
Average population density, 1998	278 p/ha	155 p/ha
Annual population growth rate, 1995	1.14%	1.16 %
Permanent dwelling units	40,861 – 49 %	91,101 – 60%
Slums/old settlements	22,358 – 27%	28,800 – 19%
Shanties	20,685 – 24%	30,232 —21%
Roads, km	480	760
Garbage generation, tons per day	625	877

Note: Greater Colombo = Colombo + Dehiwala Mt. Lavinia + Sri Jayawardenepura Kotte (2001).

Source: Adapted from Sevanatha (2000).

As the country's trading, commercial and administrative centre, Colombo has been a powerful magnet for both rural and urban people alike, particularly after independence. Undeniably, this has been consistently acknowledged in all planned interventions for the region, and has been unreservedly reinforced. As with most major cities, its growth has been primarily driven by two phenomena—natural population growth and migration from the rest of the island. But unlike most cities, migrants included not only those from rural areas seeking menial or white collar jobs, but also refugees and those displaced by the war in the north and north east.

4 An emerging trend: an urban chaos

For a time, Colombo managed to maintain a low rate of rural-urban migration through government efforts to develop rural regions with colonization schemes and estate development programmes. However, these efforts have been seriously hampered by the war in the north. This, coupled with natural growth, has led to unmanaged development, giving rise to what may be predicted as an emerging chaos. This is evident in many spheres ranging from housing to public spaces and from transport to shopping arcades, as witnessed by residents living among the inner labyrinths of ad hoc spatial enclosures relying on outdated services, or by visitors who confront traffic jams, noise, pollution and derelict public areas.

4.1 Slums, shanties and derelict neighbourhoods

As Table 1 shows, by 2001, only 49 per cent of Colombo's housing stock was of permanent nature: slums and shanties, respectively, accounted for 27 per cent and 24 per cent. This is shocking for an urban centre aspiring to be a gracious city and the commercial and financial hub of South Asia. Housing, however, has not been neglected in the city's plans. Recognizing the futility of governments trying to provide housing for the poor, Sri Lanka revolutionized the process in the 1980s by shifting from 'provision' to 'support' (Weerapana 1986; Gunatilake 1986; Dayaratne 1992). Indeed, Sri Lanka's Million Housing Programme (MHP) and particularly its urban housing sector were lauded as exemplary and won the prestigious World Habitat Award of the BSHF¹ in 1987. Hamdi (1991) goes further and in *Housing without Houses*, advocates the practice as the way forward for the world. Undeniably, under the programme, many slum and squatter settlements were successfully upgraded to reasonably good housing standards which were then expected to be 'incrementally developed' by the owners themselves.

Despite these positive and promising developments, not much seems to have changed since 1990s in either the quantity or the quality of low-income housing. The Million Housing Programme, which was expanded to the 1.5 Million Housing Programme, has been abandoned along with the National Housing Development Authority that spearheaded the movement. The ideology is no longer practised and housing the poor has received only minimal attention. One reason is perhaps the recognition that the central problem is not housing, but economics. Thus the emphasis has shifted to poverty alleviation for which purpose programmes such as *Janasaviya* and *Samurdi* were

¹ Building and Social Housing Foundation.

implemented.² As island-wide programmes, these were intended to upgrade the skills and abilities of the poorest of the poor so that they could acquire financial stability and thereby help address the housing issues by themselves.

The situation with Colombo's permanent residential buildings, accounting for half of the city's housing stock, is not much better either. Although there are exclusive, fashionable residential neighbourhoods such as Cinnamon Gardens (Colombo 7), Thimbirigasyaya (Colombo 5), or Kollupitiya (Colombo 3), there are many areas where even permanent dwellings show signs of ad hoc development, squalor and dilapidation. The main responsibility, of course, lies with the Colombo Municipality Council, that has failed either to direct or to supervise residential development effectively. Encroachment of public space and illegal extensions are rampant. As rental demand is high, enclosed space is a precious commodity that people are willing to create even at the expense of health and wellbeing of others. Plot sizes have diminished from some 20 perch blocks in the 1960s and 1970s to 6 perch blocks in the 1980s with a regulation to retain a minimum one-third of the plot as open space. Regardless of stipulations, numerous violations have reduced these open spaces, transforming the entire city into a huge built-up site with only minimal open areas for breathing. Undeniably, the quality of life has suffered immensely.

4.2 Transport infrastructure

Colombo's permanent population is only 800,000 living within a land area of 3,731 hectares, but it attracts on average a million people a day, creating huge demands on the transport infrastructure. Colombo has only 480 kilometres of roads but their condition is poor. On the one hand, they are inadequate for the traffic to and from the city where almost all government services exist. By 2001, almost 0.5 million motor vehicles had been registered in Colombo (Kumarage 2007), most of which head to the city because private and public sectors favour Colombo as the ideal place to set up office, despite the high rental values and inconvenience of traffic. Added to this is the fact that Sri Lankan driving habits lack good manners and discipline. As a result, traffic jams worsen, intensifying the noise and pollution. Absence of parking facilities and the practice of parking in unauthorized areas also add to this turmoil, although parking alongside the main thoroughways has recently been banned during peak hours and a system of one-way streets introduced in the core areas.

The system of roads and the drainage system often fail in adverse weather and more often than not, many parts of Colombo are flooded during heavy rains, an annual occurrence. The drainage system is faulty and its maintenance is almost totally lacking. Garbage is left on the sidewalks, and polythene ends up in the drains, blocking the already inadequate system that is barely able to cope with gushing rainwater. The railway system dates back from the colonial administration and has hardly been extended, improved or modernized. Despite the fact that there have been plans for a mono rail transport, nothing significant has been introduced to ease the congestion on the roads. In fact, according to Chandrasiri (1999), Colombo's transport creates immense pollution problems and is the most serious problem of the city that demands urgent attention.

² Jansaviya and Samurdi, intend to transform the 'have-not' and 'skilled-not' to 'haves' and 'skilled' by financial support and skill development.

4.3 Public spaces

Although road congestion and blocked drainage systems make the streets uninviting, its public spaces and greeneries could be pleasant and enjoyable, if one is able to encounter them at leisure. Colombo's public spaces are few and are a remnant of the garden city of the 1960s. However, parks such as the Galle Face Green along the oceanfront, and the Independence Square or the Viharamahadevi Park are unique, offering breathing space and a sense of grandeur and exoticness. In addition, the city benefits from the naturally abundant greenery that dots the landscape, but these are relics of earlier eras rather than being planned or maintained. The tree-lined streets around Thummula, for example, are the reminder of the grand plan for the garden city that has almost been abandoned. However, the remaining public spaces and greenery are perhaps the only elements of the city which suggest that the possibility of becoming a gracious city still exists for Colombo.

Nevertheless, Colombo's public spaces have also come under severe strain because of the recent war in the north and its reciprocations. For the past three decades, the city was under the threat of intermittent terrorist attacks of the LTTE³ who were striving for a separate state in the north and north east. Infiltration of likely suicide bombers transformed Colombo into a city under siege. Prior to May 2009, when the LTTE was defeated, every major road had roadblocks, security check points, barricades and battalions of army and police personnel while every building posted a security guard at the entrance. Despite the end of the war, Colombo remains vigilant and its vulnerability to terror attacks cannot be underestimated. Its public buildings and spaces are perhaps among the most unobtrusively watched in South Asia.

Colombo's security-consciousness has had numerous ramifications, and the city's open, accessible intertwined spaces are becoming closed, inaccessible, separate entities blocked off by high perimeter walls. In fact, visitors exist in an exclusive space with very limited access to the city's inner sanctums without submitting to being screened, searched and questioned. Although the fear of spontaneous terror attacks and road bombs has subsided, apprehension of possible danger overwhelms, and both residents and visitors undeniably find the city a distressed terrain.

4.4 Infrastructure and garbage disposal

Colombo inherited a central sewer system that dates from the colonial times, a distinction that no other Sri Lankan city can claim, with the exception of Dehiwala. Designed with the vision of a small garden city in mind, it worked well until independence, and was under the joint jurisdiction of the public works department and the CMC. But it is old and far from the level of service needed in a modern, vastly, expanding city. In fact, virtually nothing has been upgraded on a systematic basis, and only the long-overdue occasional repair work was done. The danger exists that the system very soon will be unable to cope with the demands made on it. As Silva writes (2008), 'Colombo is today teetering on the verge of collapse, through overcrowding, water supply, electricity, housing and most other needs are at a premium. The sewage system, designed by the British and never maintained for the past 200 years is on its last legs'. In fact, Silva (2008) points out that 'it pours untreated raw sewage into the sea as

³ Liberation Tigers of Tamil Eelam is a Tamil organization.

Colombo has no sewage treatment plant. Our municipalities, not only in Colombo, but in all our cities, have to begin serious maintenance of the infrastructure'. Moreover, the supply of electricity and water is overburdened despite the establishment of a Water Supply and Drainage Board and the Sri Lanka Electricity Board with whom the CMC liaises in providing these services.

With the addition of more garbage collection trucks and incorporation of private services, Colombo's garbage disposal system works reasonably well in the inner city, although in many areas heaps of garbage spill over onto the pavements. Undeniably, the general cleanliness of the city is in question and there is clear evidence that the system is not able to cope with the large numbers of people who litter public spaces, taking their cue from the general untidiness of these areas.

4.5 Schools and other facilities

It is ironical that most of the best public and government schools, hospitals and playgrounds are in the city and only few are located in the outstations and suburbs. Schools are one of the major reasons for the day migrants to the city, contributing to its traffic congestion and high population density. As one of the main criteria of admission to school is the distance, many families are moving to the city to enrol their children, adding to an unmanageable demand on the residential facilities in the vicinities of schools. In fact, 210,000 children attend school in Colombo, half of whom are estimated to come in from the suburbs. The recent wave of private and international schools mushrooming in the city has made the situation even worse.

One cannot ignore the fact that other higher-level educational establishments are also in the city. Although Colombo does not necessarily have any specific significance for these institutes, they have crowded into the city purely because it is perceived as the location of important activities. Much of the serious traffic congestion and demands on the infrastructure could have been avoided if the establishment of such enterprises in Colombo had been controlled. The chaotic outcome is, in fact, the result of unmanaged urbanization and development rather than being an unavoidable consequence.

4.6 Mega apartment projects

The most recent development compounding the chaos is the emergence of the condominium high-rise apartments that has been driven by two urbanization forces. On the one hand, Colombo is considered as an ideal place of residence because of its convenient access to good schools and other amenities. Also offices and government agencies have created demand for commercial and residential facilities in the city. To admit a child to a good school, a Colombo address is needed and the new residential towers conveniently provide this to those who can afford it. On the other hand, many Sri Lankan migrants living overseas have returned to home to live or in search of investment opportunities in prime locations: once again, in Colombo itself. This was even more pronounced until recently: a sizable proportion of northern Tamils, who had moved abroad to avoid living in war-trodden Jaffna, have returned to Sri Lanka and their choice of residence has also been the Colombo city itself.

In fact, since the cease-fire agreement in 2001, many Sri Lankan expatriates returned to Colombo to settle down permanently. Ad hoc temporary housing and permanent luxury

apartments cater to these people and are transforming Colombo into a city of towering apartments, the popularity of which would have been unimaginable a few years ago. According to the Condominium Management Authority, in 2007 there was a 35 per cent increase over the previous year in the condominium certificates issued: 90 per cent of the buyers were expatriates. A middle-range three bedroom apartment was sold in 2008 for US\$550,000, a price comparable to those in popular western cities.⁴ According to Kulamannage (2007), who cites the Furkhan developer announcements,⁵ 400 new units each were predicted in 2008 and 2009, with another 1800 units in 2010, 200 in 2011 and 600 in 2012. In addition, 4,000 units were under construction. Undeniably, Colombo will face greatly increased demand for electricity, water and garbage disposal and other services, and will be inundated by traffic to service these apartments.

5 Implementation of development controls

On a micro-scale, the chaotic development of the city, however, arises from the inability of the planning authorities (CMC and UDA) to implement sound controls over the city's real estate developments, or supervise those already in existence. Certainly, city development needs to be moderated to ensure healthy growth. However, Sri Lanka, considering itself a developing nation seems to think that development *per se* is good and needs to be promoted at any cost. Moreover, policymakers are at the mercy of errant politicians who are able to overrule development regulations even when these have been based on careful, professional investigative studies. Authorities often amend the rules and regulations to suit trends, undermining the city's well-intentioned development plans.

For example, regulations established within the garden city vision were based on the concept of open yard or 'rear space' to maintain a favourable ratio of built-to-unbuilt land to ensure breathing space, natural lighting and ventilation to the city's built fabric. Rear space was determined by the angle of light (at 63.5 degree) measured from the rear of a site: in order to promote natural light and ventilation, the size of internal open spaces (courtyards) was also stipulated by the angles of light. Furthermore, no part of a building was allowed to bisect this light angle. These regulations ensured a healthy balance between the built and the unbuilt.

Regulations on plot coverage and light angles ensured that adequate unbuilt land was maintained between buildings to keep the city's air clean and its open spaces spacious. However, as Wijewardane (2005) points out, open space requirements were drastically changed in the 1980s, when the light angle stipulation was scrapped completely and rear space defined according to a pre-determined guide. The impact of these changes is vividly visible in the current urban landscape. This has many implications for the health and wellbeing of the residents.

As a result, the built fabric has become more dense, impairing the levels of light within buildings and on neighbouring property. Internal courtyards have become so small that

⁴ Statistics derived from the website www.globalpropertyguide.com/Asia/Sri-Lanka/price-history, accessed 14 March 2010.

⁵ Furkhan is the real estate development arm of the Confifi Hotel Group; a leading Sri Lankan development agency.

apartments on the first two or three floors have to rely on artificial light even during the day. As Wijewardane (2005) points out, a courtyard (a lightwell) of 3mx4m (129 sq. ft) should suffice to provide natural light up to four storeys but if the structure is eight storeys, according to regulations, the light well needs to be increased only to 3mx5.3m (172 sq. ft). Rules have been modified to favour high-rise, dense development rather than quality of space. While the impact on individual buildings may be considered tolerable, the city will eventually suffer from the consequences of inadequate open spaces.

6 Lessons to be learnt

This paper has highlighted the complex outcomes of urbanization in Colombo by examining the present development trends and the need to ensure a moderate growth to promote healthy progress and improved quality of life. It is evident that in the absence of a coherent vision based on quality of life of the city, Colombo's continued emphasis on promoting development guided largely by land values and demand has been counterproductive. Many lessons need to be learnt in order to redirect and moderate the urbanization process of the city so as to help achieve the quality it is worthy of. To begin with, a number of specific weaknesses of its hitherto implemented development practices can be cited as being at the core of this dilemma.

- Lack of a meaningful vision and integrated strategies for the sustainable development of the city;
- Increasing disparity between the quantity and quality of the available urban services to promote growth;
- Unproductive approaches to create sustainable urban settlements for the low-income inhabitants of the city;
- Unrealistic assessment of the city's development potential and promotion of erratic growth;
- Erosion of the institutional structure and lack of efficient improvements to the city management system; and
- Focus and emphasis on the service-demanding, impact-strapped mega developments in large numbers.

However, a more fundamental question needs to be raised and answered before addressing these issues. First of all, it is necessary to determine if a city like Colombo should limit its growth and if so, how can the parameters for such restrictions can be set. It is argued that overgrowth is counterproductive and the development of a city must not yield to endless urbanization pressures if its carrying capacity, defined by land, physical and human resources and its developmental vision, is unable to sustain the change.

7 Counterproductivity of overgrowth

It is clear that development in Colombo after independence has re-configured the spatial framework of the British colonial period that was defined by its visionary objective of a garden city. Over time, the old fort area has evolved as the centre of commerce and finance with much of the administrative functions relocated towards the periphery of the

city. Colombo's limited infrastructure, roads, and other services—impossible to enlarge within the old system—means that the city's current growth has overshot its carrying capacity as an urban structure. The subsequent amendments to this vision (CMR-1996) offer no guidance on how the goal of a gracious city can be achieved in relation to its carrying capacities of space and infrastructure. In the absence of an appropriate spatial and infrastructural framework, promoting development largely results in adverse effects on society, not progress, because city expansion attracts more people requiring more services and infrastructure that can be created only on an ad hoc basis. Overcrowding, traffic jams and pollution are not the indicators of healthy growth, but these are the obvious outcomes of decades of development in Colombo.

In fact, ramifications of the overgrowth of Colombo can be seen all over the entire island, but more so in its immediate vicinity. The Centre for Policy Alternative puts it succinctly in its statement,

Limited investment in areas outside the Western Province means that people, jobs and infrastructure are drawn to the more prosperous areas, creating poverty pockets in the regions that suffer from under-investment, limited facilities and inadequate service provision (2007).

The North and Northeast Provinces had been neglected to such an extent that the Tamils living in these areas have interpreted the lack of progress as being racially motivated, one of the long-held sentiments triggering the LTTE-government conflict. The root causes of the JVP-led⁶ youth uprisings of the south in 1973 and 1985 were also founded in the lack of development and progress in the rural areas: a popular political slogan of the JVP sums it up: *Colombata Kiri, Apata Kekiri* (milk for Colombo and junk for us). Similarly, the Uva, North Central and Eastern Provinces have long been disadvantaged by the absence of meaningful investments which could help negate migration to Colombo and promote healthy growth elsewhere on the island.

The beautiful high-rises certainly speak of prosperity and progress. But they are small cities in themselves, with respect to the people living there and the amount of energy consumed and waste produced. The tendency is also to create these as self-contained, clean, gated spaces isolated against the dirty chaotic city. Current trends in development seem to encourage these towers and they are often built in large number in the well-kept quieter suburbs. Consequently, even these residential neighbourhoods, which once were the better areas of the city, are becoming overcrowded ghettos attracting street vendors, pavement hawkers and others from the surrounding slums and shanties looking for economic opportunities. Despite entire departments of the Colombo Municipality and Urban Development Authority being devoted to deal with slums and shanties, they have not been able to curtail their proliferation. The encouraged overgrowth creates the ubiquitous poor-rich disparities that manifest not only in society but in the city space itself. Time has come for city planners to acknowledge the counterproductivity of overgrowth and to take steps to moderate and manage the urbanization process within the limits of Colombo's carrying capacity. Efforts should be made to rigorously promote growth and urbanization in the periphery and in the satellite towns often outlined in earlier intervention plans. As Wickramasinghe puts it, 'Unless we modernize our towns and

⁶ JVP (Janatha Vimukthi Peramuna) or the People's Liberation Front is a radical organization led by violent Sinhalese youth.

cities and solve the slums and shanty problems, we are going to be experiencing an urban nightmare shortly' (2001).

This paper suggests that Colombo and other cities displaying similar problems should detach themselves from the current approach to urbanization and growth, in favour of a holistic approach to development. In this regard, the idea of vertical growth and lateral growth often used to map out personal development is offered as one of the most meaningful concepts in understanding and applying this new direction.

8 Between vertical growth and lateral growth

Vertical growth is a high-level goal-oriented approach that measures growth largely in terms of visible indicators such as size, scale and impact. It requires considerable investment, concentrates on specific locations and transforms these rigorously with only a few snowball effects. In comparison, lateral growth involves low-impact yet qualitative improvements in a wide spectrum of spaces simultaneously. Measurable in terms of quality of space, opportunities generated and snowball effects, such growth is soft on investment demands and generates a wider transformation of spaces but adds a significant quality change to large regions and communities. However, neither growth pattern by itself yields healthy meaningful growth, if pursued in the absence of the other.

In order to promote healthy progress and development, it is proposed here that a city endeavouring to create good life-quality must achieve both vertical and lateral growth, and balance the two in a meaningful manner that is appropriate to the 'place'. Emphasizing one or the other mode of growth depends on various factors such as place, situation and the needs and capacities of the communities and their circumstances. Growth management involves making judgements on the model appropriate for development and growth, strategizing an approach, which addresses the needs of the community, in view of their capacities and the availability of resources. A comparison of these forms of growth could be illustrated as given in Table 2.

As is obvious from Colombo's current approach to managing urbanization and promoting growth, the city seems more focused on vertical growth, almost neglecting or shabbily pursuing lateral growth. Residential spaces, slums, shanties, public spaces and infrastructure are often overlooked in the pursuit of high-impact mega-scale individual projects. The current interest in promoting condominiums while improvements

Table 2
Vertical growth and lateral growth

Vertical growth	Lateral growth
<ul style="list-style-type: none"> • Physical goal oriented • Measures growth quantitatively: large scale, high impact and focused • Creates few and limited opportunities • High visibility, concentrated on location • Benefits a small group of people. Contributes to quality of life • Spreads benefits to the close-at-hand 	<ul style="list-style-type: none"> • Non-physical goal oriented • Measures growth qualitatively; small scale and broad based • Creates a spectrum of opportunities • Often invisible and spread across regions • Benefits communities, and contributes much to the quality of life • Spreads the benefits far by snowballing

Source: compiled by author.

to slum and shanty settlements have been suspended (Wakely 2008) shows this clearly. Unquestionably, these projects provide high visibility value that generates a sense of achievement but in the absence of lateral growth, contribute little to city life.

This paper argues that the current approach must be changed and Colombo needs severely to curtail its high impact, goal-searching, project-based development and to focus mainly on the qualitative upliftment of the city and its urban fabric. On the one hand, the city is incapable of carrying mega projects with the limited infrastructure presently available. On the other, it has been shown that mega-scale development projects do not improve the city as a whole. Moreover, such projects, despite having contributed to the upgrading of selected gated areas, have also added immensely to aggravate overcrowding, congestion and undue demand on the already overstretched services.

9 Transforming slums and shanties: an engine of lateral growth

In this context, one of the most urgent and essential measures to steer the growth of Colombo is resolving the ever-present issue of slums and shanties (now called unserviced settlements to remove their negative connotation). Occupying a large portion of the city, unserviced settlements have established an underlying framework of spatiality and activity systems that degrades urbanity. There are some 66,000 slums in Colombo covering 1,000 acres of potentially high-valued development land. Much of the land is government owned, and encroachment by the poor has transformed them to slums, and delayed positive growth of the regions. The process is double-edged in that it creates more and more slum dwellers because residents cannot educate their children or empower them with marketable skills to break the vicious circle. The number of slums is also increasing with the extra flux of refugees from the north, and the low-income settlements remain outside the mainstream real estate markets, blocking vital land from being developed. It is certain that the city cannot progress with half its population in the low-income sector, living in ad hoc settlements that occupy vast masses of land which have been isolated from the real estate markets by socialist policies.

Many programmes and approaches have been tried in the past (Dayaratne 2009) but despite obvious improvements, statistics reveal that slums and shanties are expanding. A 'wicked problem' (Rittel and Webber 1973) that cannot be resolved by 'perfect solutions', solving the issue of slums and shanties requires multi-faceted programmes of re-housing, upgrading, supporting and all other means currently available to city planners. In fact, contrary to Wakely's (2008) assertion, one of the most recent approaches of creating 'sustainable townships' through Real Estate Exchange (REEL) could be a pertinent way forward to deal with unserviced settlements in Colombo (Wickrema 2005; Dayaratne 2010).

Through REEL,⁷ the state persuaded some of the low-income slum dwellers in Wanatamulla (an old large slum area) to exchange their land for flats in a high-rise building (referred to as *Sahasapura*) as equity whereby land is released for development while illegal squatters become real estate owners. Although this approach, and all the

⁷ Real Estate Exchange Limited is a government-owned company.

preceding forerunners to it, has encountered enormous practical problems in the way it has been implemented, it is suggested that this concept be re-articulated. It needs to become more realistic, yet persuasive and rigorous in order for slum dwellers relocate to modern apartments wherever possible and, at the same time, to upgrade the dilapidated areas through the provision of amenities. Of course, all other approaches such as measures to enable, support, upgrade and re-locate must also be employed on the merits of their appropriateness in specific places and communities.

However, eliminating slums and shanties is unlikely on its own to ensure a healthy lateral growth of a city as a whole. If a planning practice is not founded on regionally specific issues and on the potential and the resourcefulness of the people themselves to effect change, a programme of lateral growth can be neither meaningfully conceptualized nor practically implemented. It is suggested here that for such a change, the concept of 'place as the basis of planned interventions' offers a potent option that has far reaching consequences.

10 Place as the basis for development

This approach is based on the premise that a city, in connection with planned interventions, should be perceived as being made up of 'places' and a 'system of places' (Dayaratne 1992). Although place is an everyday concept without any special significance, many in the fields of geography (Tuan 1977), environmental psychology (Canter 1978) and architecture (Alexander 1977) have highlighted the importance of the concept in devising spatial interventions at all levels. First and foremost, it is the most fundamental geographical and spatial entity of the conceptualization of a physical environment by planners, architects, city managers and residents alike. For this reason, it enables meaningful cross communication of issues among producers and managers of cities in a productive manner. At the same time, architects and planners as well as people use place as the unit of intervention in the urban space and therefore, the understanding of these issues and their solutions can easily be translated into the places themselves more effectively than the current practice.

The growth of a city is both the sum of the growth of the places in the city as well as of the city itself as a place. City places are understood primarily by those who inhabit them and act on them. Places are unique and each place has its own set of resources, potentials, opportunities and problems. Hence, understanding people and places is central to planning and development, and must become its central tenet. In this regard, Robson (1986) offers a fruitful set of propositions that can help articulate the idea of place as the basis for revising planned interventions as follows.

Proposition 1:

That no policy or action of any kind should be contemplated without exhaustive investigation of activities and places carried out by the policy makers by themselves rather than by 'others' who supply the 'information'. In other words, insight is central to planned interventions.

Proposition 2:

That the locality should be the centre of planning activity. It is suggested

here that the ideal venue for developing policy is the maximum size where 'people and places' can be considered as unity, and that this is the locality.

Proposition 3:

That towns and their places should be considered as four dimensional artefacts. In general, places are perceived as being constituted of 'physical, social and psychological as well as historical dimensions'. In order to understand a place properly, all four dimensions need to be equally examined.

Proposition 4:

An understanding of places must entail the temporality of activities and the place. This means that places must be seen as existing within the dimension of time, and that planning is a decisive but temporary intervention of an otherwise continuing process from the past to the present and the future.

Proposition 5:

That the overall policy of planned interventions of places should be general mixed-use with the promotion of the unique activities intrinsic to the places. This implies that many places can be seen to thrive on certain local activities that define and give identity to places. It is essential to reinforce those activities while also promoting a set of other related activities.

Proposition 6:

That centres of towns should have substantial residential use. This means that residential environments or the presence of inhabitants should be created in central locations, not only in secluded neighbourhoods. Indeed, places become healthy and meaningful only when there are people living in them, rather than only passing through.

Proposition 7:

That places should be made to evolve upon healthy local economies. This proposition, an extension of the proposition 5, emphasizes the need to build up economies that are anchored primarily in the locality. A lively local economy is considered to be one of the major causes of the economy of a city.

Proposition 8:

That a variety of roles are beneficial to a town. This proposition, an extension of proposition 5, emphasizes the significance of a major role for a locality and the need to also promote a variety of other roles. This enhances the vitality of a place.

Proposition 9:

Planned interventions should be based on the unique characteristics of places and its inhabitants. Often the character of a place is considered the least important of an area in urban development. It does not even consider the nature of the inhabitants for such a purpose. This proposition suggests

that the uniqueness of places should, in fact, be the basis of all local planned interventions.

11 Conclusion

This paper examines the urbanization trends and the growth of Colombo and its present level of development. It looks at the city's approaches to planned interventions and demonstrates how a uni-directional urban development has had a detrimental impact on the sustainable growth and quality of life in Colombo where half of the population still live in slums and shanties. The paper shows that the city has promoted high impact 'vertical growth' and argues that in the absence of healthy 'lateral growth', Colombo is unlikely to achieve its vision of a gracious city. The paper points out that growth and development of a city must be managed in such a way to enhance its liveability, which requires both vertical and lateral growth.

The paper proposes that Colombo embark on the next wave of vertical growth only pursuant to a programme that is focused on lateral growth aimed at enhancing the quality of the spaces and places of the city. The paper suggests that to energize such a development process, the issue of slums and shanties should be resolved by all means available, and highlights the potential value of 'real estate exchange' as a way forward. It also suggests another shift; to consider the 'uniqueness of place' as the basis of planned interventions, offering a set of propositions to articulate such an approach.

Once the infrastructure is upgraded to meet the requirements imposed by another wave of development, Colombo will be able to re-orientate towards a balanced programme of vertical and lateral growth that is commensurate with the development footprint of its geographical terrain. Unless tasks to battle the spiralling overgrowth that exceeds its urban capacity on the one hand, and unhealthy undergrowth in the slums and shanties on the other are tackled with a decisive plan of action, Colombo is doomed to chaos, turmoil and unrecoverable collapse.

References

- Alexander, C. (1977). *A Pattern Language*. New York: Oxford University Press.
- Canter, D. V. (1978). *Psychology of Place*. London: Architectural Press.
- Centre for Policy Alternatives (2007). 'Poverty Alleviation Programmes Ineffective'. *Sunday Times*, 28 October.
- Chandrasiri, S. (1999). 'Colombo Chokes on the Car: The Case for Controlling Automotive Air Pollution'. EEPSEA Policy Brief. Singapore: Economy and Environment Programme for South East Asia.
- Dayaratne, R. (1992) 'Supporting People's Placemaking: Theory and Practice, The Million Housing Programme of Sri Lanka'. Newcastle: University of Newcastle upon Tyne. PhD Thesis.

- Dayaratne, R. (2009). 'Social Challenges in Low-Income Housing: The Sri Lankan Experience'. In J. K. Levin (ed.), *Low Incomes: Health, Education and Social Impacts*. New York: Nova Publishers, 141-59.
- Dayaratne, R. (2010). 'Creating Sustainable Habitats for the Urban Poor: Redesigning Slums into Condominium High-Rises in Colombo'. In P. S. Geller (ed.), *Built Environment: Design, Management and Applications*. New York: Nova Publishers.
- Gunatilake, V. (1986). 'From Provision to Support'. Newcastle: University of Newcastle upon Tyne. Mimeo.
- Hamdi, N. (1991). *Housing without Houses*. London: Van Nostrand Reinhardt.
- Kulamannage, S. (2007). 'Popping Noise'. Lanka Business Online. Available at: www.lankabusinessonline.com/fullstory/php?nid=910673774.
- Kumarage, A. (2007). 'Impact of Transportation Infrastructure and Services on Urban Poverty and Land Development in Colombo, Sri Lanka'. *Global Urban Development Magazine*, 3 (1).
- Perera, N. (1998). *Society and Space, Colonialism, Nationalism and Post Colonial Identity in Sri Lanka*. Boulder, CO: Westview Press.
- Rittel, H., and M. Webber (1973). 'Dilemmas in a General Theory of Planning'. *Policy Sciences*, 4: 155-6.
- Robson, B. (1986). 'Uniqueness of Place as the Basis for Local Planning'. University of Newcastle upon Tyne. Unpublished PhD thesis.
- Sevanatha (2000) 'City Profiles: Colombo'. Paper presented at the Fukuoka Conference on Asian City Development Strategies, Japan.
- (De) Silva, J. (2008). 'Unravelling the Mess'. Sri Lanka Defence Column of the Ministry of Defence Website. Available at: www.defence.lk/new.asp?fname=20080220_0221/2.2008.
- Tuan, Y.-F. (1977). *Space and Place. The Perspective of Experience*. Minneapolis: University of Minnesota Press.
- UDA (Urban Development Authority) (1998). 'Colombo Metropolitan Regional Structure Plan'. Colombo: UDA.
- Wakely, P. (2008). 'Land Tenure in Underserviced Settlements in Colombo'. Urban Poverty and Environment Report 6. Ottawa: IDRC.
- Weerapana, D. (1986). 'Evolution of a Support Policy of Shelter: The Experience of Sri Lanka'. *Habitat International*, 10 (3): 79-89.
- Wickramasinghe, S. (2001) 'Inaugural Speech of the Chamber of Commerce Sri Lanka'. Colombo.
- Wickrema, M. (2005). 'Moving on up: Mainstreaming Under-Serviced Urban Communities in Colombo, Sri Lanka'. Cambridge, MA: MIT. Thesis (M.C.P.) Available at: www.hdl.handle.net/1721.1/33065.
- Wijewardane, D. H. (2005). 'Colombo, once a Garden City Turning into a Concrete Jungle'. *Daily News*. 2nd June.