



Housing and Sustainable Urban Development in Sri Lanka

**National Report for the Third United Nations Conference
on Human Settlements
Habitat III**

**Ministry of Housing & Construction
of the Government of
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Housing and Sustainable Urban Development in Sri Lanka Country Report for the Third United Nations Conference on Human Settlements- Habitat III

EXECUTIVE SUMMARY

Sri Lanka's Country Report for Habitat III is produced after the installation of a new Government in January 2015 only a few years after the cessation of a protracted civil strife that lasted for nearly 30 years. Except for some of those of the Eastern and Northern Provinces who fled to other parts of the country during the civil strife returning back to their homes, no other drastic changes in the internal migration pattern have been observed. The population growth is one of the lowest in the region and urbanization in terms of increase of persons living in areas designated as 'urban' has a pattern of its own, which some perceive as low with the population of Colombo City actually decreasing. The state of human settlements is reviewed against this background.

Urban Demographic Issues and Challenges for a New Urban Agenda

The first and foremost challenge for a New Urban Agenda is the definition of 'urban' and 'urbanization', the use of which would be the ultimate tool to manage urban areas; tackling urban demographic issues will solely depend on the practicality of these definitions. Closely following is the mammoth task of healing the social, psychological and physical wounds left over by the civil strife. Integration of women-headed families and families with physically disabled male members is a daunting activity needing a very sensitive approach. Some of these families are returning to find severely damaged houses and villages, and the need to bring them back to the original or a better state is of paramount importance. The inter-urban migration that has been happening all the time needs to be considered as well. The high proportion of these migrations emanating from the central province alone could be a concern although from an environmental point-of-view it is a welcome move.

Sri Lanka's urban-rural linkages have been getting stronger during the last few decades owing to the village-based development programmes of the government; the village reawakening programme and rural-empowerment programme have revitalized the rural areas and the concurrent infrastructure development and service centre development programmes have strengthened urban-rural ties thus retarding rural-urban migrations to a great extent. However administrative lapses and inefficiencies inherent in the public sector have diminished the effectiveness of several progressive legislation aimed at improving the socio-economic and physical environment of the people especially that of the disabled, the aged, the youth and those who are living in disaster-prone areas. The proposed Western Megapolis Plan could catalyse some rural-urban migration which could be detrimental to the urban fabric unless properly managed.

Demographically, the country is moving towards a female-dominated aged population. The New Urban Agenda will need to cater to that scenario too.

Land and Urban Planning: Issues and Challenges for a New Urban Agenda

Sri Lanka's planning system is relatively strong at macro levels; however at micro levels several defects are observed; mainly it is the implementation strategy that needs to be reviewed afresh. However since at local authority level, planning is not genuinely decentralized and even where it is, the local authorities are not technically capable to undertake such tasks, micro level planning appears to be ad hoc and fragmentary. In regard to urban land management interactive plan implementation is almost absent. Negotiations with investors and private sector to maximise public benefits which could accrue from a project is not generally the norm. Coupled to this is the issue of urban mobility which is not yet considered as part of zoning or land use planning. The phenomenal increase in private car usage which contributes to traffic congestion in cities is a direct result of such oversight. It has also been observed that the lack of proper planning at micro levels and commitment to effective implementation of planning at macro level have led to gradual incursion of human settlements into forests and agriculture areas resulting in environmental problems as well as increasing animal-human conflicts.

Environment and Urbanization: Issues and Challenges for a New Urban Agenda

The national physical plan has given policy and planning guidelines to respond to effects of climate change; it has also identified environmentally fragile areas of the country exploitation of which will have an adverse bearing on the food and water security in the future. On the other hand, the quality of air has been below critical levels in all areas of the country. The contribution of the country towards GHG emissions has been negligible and Sri Lanka is among the few non-polluting countries in the world. However this situation may be slowly changing with the development projects being undertaken at present. The confronting of environmental issues while catering to the development pressures in a small island with a relatively high population density is a challenging task. The proposal of the national physical plan to develop high density cities at strategic locations and low density villages among a protected area network could strike a balance between conservation and development. Continued monitoring of development activities vis-à-vis the national physical plan is an essential condition for the envisaged benefits of the plan to be realized; however, that kind of total commitment has not been observed in recent times.

Urban Governance and Legislation: Issues and Challenges for a New Urban Agenda

The Constitution of Sri Lanka is presently under review; new thinking on decentralization and devolution are emerging at various discussions. The strengthening of local authorities is also in the agenda and some changes to the framework in which local authorities are functioning and their relation to provincial and central government is likely to undergo changes. A new system of planning covering all levels has already been submitted for consideration. The present planning system already has certain built-in safeguards related to human rights; but the new system is expected to

enhance those rights. The constitutional provision that the powers already enjoyed by local authorities cannot be reduced or removed will ensure that the changes will further strengthen local authorities; whether there would be a corresponding and substantial increase in the capacity of local authorities is a matter of concern given Sri Lanka's centre-oriented state structure.

Urban Economy: Issues and Challenges for a New Urban Agenda

There are wide disparities in the financial position of local authorities; the financial outreach of the Colombo Municipal Council cannot be matched by all the local authorities put together in most of the provinces. Most of the time, the development projects implemented by the central government, especially settlement projects are eventually handed over to local authorities to be maintained; the result being the local authorities being saddled with additional maintenance costs that they can hardly bear. Even in the City of Colombo the government is the largest investor, the private sector failing to perform at the expected level; hence local economy is determined by the priorities of the central government and most of the local authorities play only a marginal passive role. In regard to creation of decent jobs, there appear to be no concerted effort to explore fresh streams of employment potential; rather, the government is forced to negotiate with foreign countries especially those in the Middle East and Korea for employment opportunities at lower levels. The recent development of IT industry has been an exception with the government facilitating most of the infrastructure and the global IT industry percolating into local soil.

The need to integrate local economy into national development policy cannot be over-emphasized. Irrespective of the planning source, the local authority should be a key partner in the implementation mechanism. The challenge of a New Urban Agenda is to make sure that it becomes a reality.

Housing and Basic Services: Issues and Challenges for a New Urban Agenda

Access to adequate housing has been a government priority ever since in 1978 Sri Lanka proposed to the United Nations that an international year of housing be declared. The International Year of Shelter for the Homeless was accordingly declared in 1987. The programmes aimed at uplifting the living conditions of people centred on housing development from that time onwards have paid rich dividends looking at the performance of Sri Lanka. The availability of potable water, sanitation, drainage, clean energy and accessibility to urban amenities is higher than many countries in the region. However there is room for many improvements, especially in regard to community housing, housing finance and access to land. The National Housing Policy has also identified several non-conventional needs of housing such as rental housing, over-night stays, etc.

The New Urban Agenda needs to consider moving up to the next level of development where quality of housing is to be enhanced; the UN declaration of human rights and other related policy documents identify security of tenure, access to public services, access to environmental assets, affordability, priority for the needs of vulnerable groups, proper location, compatibility of the use of materials, structure, space with the occupant's culture, all as constituting the notion of adequate housing. However the Sri Lankan approach to a New Urban Agenda would also consider the inclusion

of some sensitive but essential aspects of being people-friendly; these would include the right to physical and emotional well-being, right to public and private open spaces, the right to interact with nature, right to natural light and fresh air; it may even include the right to dignity, privacy, the right to age with dignity, right to hope and joy.

The challenges are many and some are of vast scale requiring meticulous but flexible planning if the country is to steer safely through the challenges of a globalizing and an urbanizing world in the face of unpredictable effects of climate change.

The present government, which came to power in January 2015, has focused on the management of Urban Growth in the context of increasing trends of urbanization in the country. A Ministry for the development of the Western Province Megapolis has already been established and a Western Megapolis Authority, as the institution responsible for planning and managing urban growth in the Western Province is to be established in the near future. This new initiative of the government is intended to make the future urban growth more equitable and inclusive. The Government of Sri Lanka is committed to pass on to future generations, an urban society that can sustain them in harmony, an urban society rid of shameful poverty, discrimination, an urban society at peace with the environment and with itself.

**Housing and Sustainable Urban Development in Sri Lanka
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Introduction

Preamble

Habitat III is the third United Nations Human Settlement Conference and is based on the theme "Housing and Sustainable Urban Development" and will take place in 2016. The United Nations General Assembly convened the first Habitat I conference in Vancouver in 1976, as Governments began to recognize the need for Sustainable Human Settlements and consequence of rapid urbanization. The Vancouver commitments were re-confirmed twenty years later, at Habitat II conference held in Istanbul in 1996 which adopted a habitat agenda as a global plan of action for "adequate shelter for all" and "Sustainable Human Settlements in the urbanizing world" and committed to implement a plan of action based on these goals.

- i. With respect to the goal of "adequate shelter for all" Heads of States and Governments committed themselves to enabling people to obtain a shelter that is healthy, safe, secure, accessible and affordable and that includes basic services, facilities and amenities and ensuring that everyone enjoys freedom from discrimination in housing and security of tenure-all fully consistent with human rights standards. In the millennium declaration, Heads of States and Governments committed themselves to improving the lives of at least 100 million slum dwellers by 2020. They also committed themselves to halving by 2015, the proportion of the population without adequate sustainable access to drinking water and basic sanitation.
- ii. With respect to the goal of "Sustainable Human Settlements in an urbanizing world" Heads of States and Governments also committed to developing societies that make efficient use of resources within the carrying capacity of ecosystems and by providing all people, in particular those belonging to vulnerable and disadvantaged groups with equal opportunities for healthy, safe and productive life in harmony with nature and their cultural heritage and spiritual and cultural values and a life which ensures economic and social development and environmental protection, thereby contributing to achievement of National Sustainable Development.
- iii. As the focal point of the UN-Habitat in Sri Lanka the then Ministry of Housing, Construction and Public Utilities convened a National Habitat Committee in 1994 in preparation for the second United Nations conference on Human Settlements, Habitat II, held in Istanbul, Turkey in 1996. The National Report which was prepared by the National Habitat Committee contained information and a national vision pertaining to human settlements and shelter sector development in urban, rural and estate sectors of

Sri Lanka with the objective of getting the appropriate contents reflected in the global plan of actions that would be adopted at the conference. The National Habitat Committee was reconvened by the then Ministry of Urban Development Housing and Construction in the year 2000 to review the progress made since Habitat II and to submit the country report for the Istanbul +5 in 2001. That report examined the progress made by Sri Lanka since Habitat II (1996-1999). Forty years since the Habitat I in 1976 there is a wide consensus among the Habitat agenda partners, the Heads of States and Governments that the towns and cities structure, form and functionality need change as societies change. Accordingly the United Nations has emphasized on housing and sustainable environmental issues and challenges and seeks the ways and means to address these through a new urban agenda in their third United Nations conference – Habitat III to be held in 2016.

Preparation Process

The then Ministry of Construction, Engineering Services, Housing and Common Amenities as the then national focal point of UN Habitat Programme in Sri Lanka had committed to prepare this report on “Housing and Sustainable Urban Development” for the third United Nation Conference” Habitat III through a process of consultation with the participation of relevant partners. Accordingly the Ministry has obtained the approval of the Cabinet of Ministers to establish a National Habitat Steering Committee representing 21 ministries and allied agencies.

Subsequently, at the initial stage, one to one discussions, small group meetings and brainstorming sessions have been undertaken with the members of National Habitat Steering Committee representatives with a view to collect and analyse indicators, best practices, case studies, good policies, action plans and other relevant information.

A national workshop had also been organized to review national and local plans of action and their implementation since 1996 (Habitat II) and assessed the progress made and obstacles encountered in implementation of Habitat agenda in Sri Lanka. The participants at the national workshop identified priorities, issues and challenges for a new urban agenda which transcends beyond sheer human settlements focus to embrace holistic urban issues.

In order to maintain the consistency and comparability of the National Report, UN Habitat has focused on thirty issues under six key subject areas along with twelve indicators on housing and sustainable urban development. Accordingly each subject area was assigned to relevant members of the National Habitat Steering Committee and draft report prepared by them was refined and synthesized by an editorial board appointed by the national focal point.

The report is comprised of achievements made, strategies and processes adopted over the last twenty years in respect to urban demographic issues, land and urban planning, environment and urbanization, urban government and legislation, urban economy and housing and basic services, at three levels of government operational in Sri Lanka namely central, regional and local levels. The report also highlighted the challenges experienced and lessons-learned as well as future challenges and issues in these areas that could be addressed through a new urban agenda for Sri Lanka.

Consequent to changes in the Government, the responsibility of updating and finalizing the report became the responsibility of the Ministry of Housing and Construction, the present focal point. In a review process, the draft report was revised to include the new vision of the Government to foster a dynamic urban growth in selected areas of the country especially the Western Megapolis and also the reset-goal to eradicate poor housing conditions by 2030.

Chapter One

Urban Demographic Issues

1. Managing Rapid Urbanization

Sri Lanka has a total land area of 65,610 sq.km. and a population of 20.4 million as at 2012. The population density is 325 persons per sq.km. Sri Lanka has one of the lowest annual population growth rates (0.7%) in the Asian Region and an annual urban population growth of an average 0.3% over the period 2005-2012 according to official statistics.

Table 1.1: Urban-Rural Population of Sri Lanka (2012)

Census Year	Population	Urban Population	Urban %
1971	12,689,897	2,848,116	22.4%
1981	14,846,750	3,192,489	21.5%
2001*	18,797,257**	2,467,301*	13.1%*
2012	20,359,439	3,704,470	18.2%

* - Incomplete census

** - Estimate

Source: Department of Census and Statistics (2015)

In Sri Lanka 'Urban status' is conferred on an area governed by a Municipal Council or an Urban Council. However, several areas outside these have also been declared as urban development areas under the provisions of the Urban Development Authority Law. It is based on the contention that "urbanization" is not about administrative status of a local authority but the availability of urban amenities and characteristics of an urban locality. It is more about bringing a complete change of life styles from rural to urban. The traditional distinction between urban and rural areas is becoming blurred and the principle difference between urban and rural areas tends to be defined in terms of the circumstances of living trends and not the population or population density in a certain geographical area. It is time to reflect on urban and urbanization patterns and to focus on all levels of human settlements including small rural communities, villages, market towns, intermediate cities, cities and metropolises and arrive at a proper definition of "urban" that can be used to enhance the living conditions of the people.

Sri Lanka has a unique pattern of urbanization and urban population in comparison to other Asian countries. It was around 15% in 1946 and increased only up to 18.2% over the last seven decades. However the country is urbanizing as the transition from rural economy to one based on service and manufacturing progresses unabated. But it has not resulted in symptomatic problems associated with urbanization found elsewhere. The moderate population growth rate, modest urbanization trend, marginal increase of urban population as a result of vast rural based development programmes have contributed to achieve this relatively uncommon picture in comparison with other countries in the region.

However, the primacy of Colombo Metro Region is very significant; Colombo District accounts for 50% of the total urban population, Colombo City alone claiming 15%. Spatially it is fascinating to note that Sri Lanka's urban landscape is dominated by small urban settlements mostly clustered

along the coast. Out of the 64 Municipal and Urban Councils, 26 have less than 25,000 population each.

Table 1.2: Urban Population Distribution among Local Authorities

Population Bracket	Municipal/Urban Council	% of Urban Population
>500,000	Colombo MC	15.1
200,000-499,000	Kaduwela MC	6.8
100,000-199,999	6 MCc and UCc (Dehiwala Mt. Lavinia MC, Kesbewa UC, Maharagama UC, Moratuwa UC, Kotte UC)	26.6
50,000-99,999	11 MCc and UCc	22.2
25,000-49,999	19 UCc	18.3
<25,000	29 UCc	11.0
TOTAL		100

Source: Department of Census and Statistics (2014)

Nevertheless, on the basis of the total estimated population living in the officially defined urban areas and in other areas those have acquired urban characteristics although they have not been officially designated as urban areas, the present share of the urban population is considered to be between 30%-40%. However, urbanization per se appears to be mainly consisting of intra-urban movements rather than rural-urban migration. A case in point is the decrease of population of Colombo City from 647,100 (2001) to 561,314 (2012) thus losing 85,486 in 11 years. Similar trends have been observed in many cities across the country.

Table 1.3: Population Changes in Selected Cities (2001-2012)

District	City	Population (2001)	Population (2012)	Change	% Change
Colombo	Colombo	647,100	561,314	-85,486	-13.2%
Matara	Matara	64,361	96,570	+32,109	+49.9%
Hambantota	Hambantota	21,571	31,709	+10,138	+47.0%
Kurunegala	Kurunegala	34,691	30,342	-4,349	-12.5%
Anuradhapura	Anuradhapura	53,151	50,595	-2,556	-4.8%
Kegalle	Kegalle	17,139	15,993	-1,146	-6.7%

Source: Department of Census and Statistics (2006); Source: Department of Census and Statistics (2015)

Successive Governments have considered urban areas as 'engines of growth'; Governments have also invested heavily on the development of rural areas and afforded subsidies on agriculture thus discouraging any mass movement to urban areas. However the recent declaration of an ambitious megapolis plan for the Western Province and similar plans for several other strategic locations as a national and urban development strategy may stimulate urbanization rates to increase so that by the year 2040 the total urban population could be 44% of the population of the country. However the United Nations has predicted only 30% by 2050.

2. Managing Rural Urban Linkages

Urban and rural areas are closely linked in Sri Lanka and the linkages are to be further improved and managed in order to accelerate inclusive growth, to expand employment and to serve the marginalized within the sustainable development scenario.

Rapid economic growth and transforming the structure of the economy into a modern, environmentally-sustainable and well-connected rural-urban economy is the development strategy of the Government. This strategy attempts to promote benefits of growth across all segments of the population and also to prevent inequalities, social exclusion and adverse environmental impacts that have been witnessed in some of the rapidly urbanizing economies.

A majority of the population in Sri Lanka live in traditionally designated rural areas of which 70% rely on agriculture-based livelihoods. There are 38,000 villages and 14,000 village level administrative units. Some villages require increased access to key infrastructure facilities. Village re-awakening programme is an initiative focusing on the sustainable development of the villages and hamlets. Villages are no longer perceived as resource centres for urban development and their sustenance, but rather as economic entities empowering rural communities.

These development programmes have been implemented to ensure that each household is benefited economically. Large investments in infrastructure such as rural roads, water supply, sanitation and minor irrigation, rural electricity, and rural industries have been made in addition to improving the quality of the housing stock. Concurrently, rural communities have been linked to emerging townships or service centres and thereafter to commercial hubs.

Simultaneously, urban service centres are also being developed through urban development interventions to improve Local Government Units and to enhance the accessibility to markets and other basic needs of ill-connected rural areas. It has ensured the availability of urban-related facilities in rural areas.

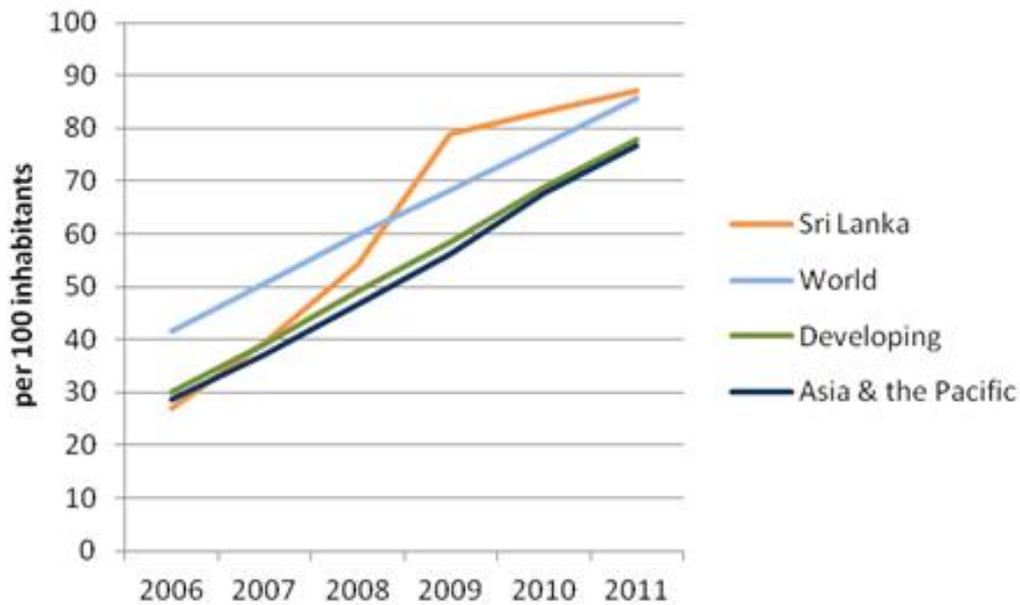
Diversifying livelihood opportunities, effective integration of the rural economy with emerging economic sectors in urban centres and thereby increasing the productivity and competitiveness of small and medium enterprise sector are also some of strategies used to achieve a regionally-balanced development in Sri Lanka. The recent initiative of promoting backyard households economic activities through many programmes targeting at 2.5 million households has given a new dimension to the rural economic base to evolve as an organized family economy.

The national development policy framework of the Government envisages transforming of the economic landscape of each region by thorough new economic development initiatives. Based on the uniqueness, availability of resources, location and economic potentials, specific regional development initiatives have been formulated. Detailed economic planning under these initiatives have been undertaken in collaboration with respective local administration clustering and networking the national provincial and local development activities under a regional development framework.

The vast strides in the development of mass media, telecommunications and internet use have revolutionized the rural-urban linkages. The diversity of television channels, phenomenal increase in

the use of mobile telephones and the country's achievements in gaining the high internet-literacy level of 24% within just one decade have broadened the understanding between the rural and urban populations especially among the youth. The number of mobile phones in use surpassed the population in 2015 to reach a staggering 24 million.

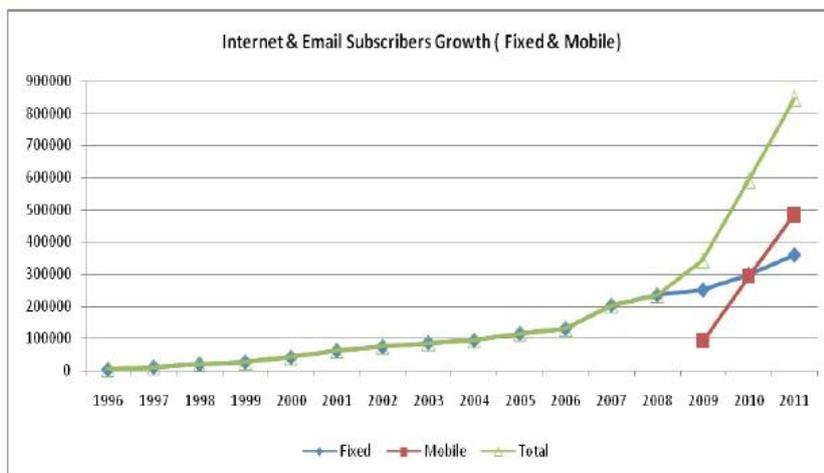
Chart 2.1: Mobile Phone Usage



Source: *Mobile Phone Usage in Sri Lanka (n.d.)*

Chart 2.2: Internet Usage in Sri Lanka

Internet Use in Sri Lanka (TRCSL data)



<http://www.trc.gov.lk/information/statistics.html>

Source: Telecommunications Regulatory Commission of Sri Lanka

3. Addressing Urban Youth Needs

3.1 Population Age Structure

In Sri Lanka, youth is defined as those between 15-29 years of age. The population share of youth has been declining since 1981 and has in 2012 reached the lowest of 23.2% since 1946; of this 50.23% are male and 49.76% are female.

Table 3.1: Population Age Groups

Census Year	0-14	15-29	Above 29
1963	41.5	25.3	33.2
1971	39.0	28.2	32.8
1981	35.2	29.6	35.2
2001	26.3	27.0	46.7
2012	25.3	23.2	51.5

Source: From data of Department of Census and Statistics (2014)

Sri Lanka has embarked on a number of initiatives for the youth in the country. Youth and their development have always been a priority of Government of Sri Lanka. Successive Governments have initiated many programmes to empower and develop youth with a view to recognize them as a significant force in the society and to mainstream them with establishment of first ever Ministry of Youth and many policy initiatives have been taken targeting on the development of youth in the county.

A National Youth Policy was adopted in 2014 based on three pillars namely, ensuring youth, enabling youth and empowering youth, and covers issues of education, employment, social exclusion and marginalization, health, urban-rural-estate sector youth, differently-abled youth and youth in peace and reconciliation.

3.2 Literacy

Literacy level of the youth stood at 98% in 2010. This is a substantial achievement due to compulsory free education for those aged below 15 years which has been the policy for the last seven decades. However, disparities in the standard of education facilities in rural and estate sectors and the severe dearth of places of tertiary education at universities have resulted in only a small number entering the universities.

3.3 Health

Malnourishment has been recognized as a chronic health condition prevailing especially among the youth; it is 41% among those between 15-19 and 22% among those between 20-29. Sector-wise 16% of urban, 24% of rural and 33% of estate sector youths were malnourished. (2012) Substance abuse (tobacco and alcohol) is also relatively high among the youth, the figure hovering around 28%. The figure tends to be higher in areas of former civil strife probably due to high stressful conditions. Deaths due to suicide was considerable; in 2011, nearly 400 suicides of those below 20 years were reported (male-female 50%-50%); in the 21-30 age group the figures were 530 males and 220 females. Number of HIV affected cases was minimal and was below 0.1%.

3.4 Unemployment

Employment of the youth was considerably higher among males than in females. This is ascribed to the tendency of females to stay at home looking after their families before embarking on an employment in spite of their having acquired the required educational qualifications.

Table 3.2: Economically Active Youth: Age and Gender-wise

Age Group	Male %	Female %
15-19	8.5	4.0
20-24	30.1	13.4
25-29	41.2	16.7

Source: Compiled from data of Department of Census and Statistics (2014)

Unemployment of youth upto age 24 is comparatively very high but afterwards reduces drastically.

Table 3.3: Youth Unemployment Rate

Age Group	2013 (%)	2014 (%)
15-19	18.7	21.5
20-24	19.2	20.0
25-29	7.5	8.3

Source: Central Bank of Sri Lanka (2015)

3.5 Poverty

Data specific for urban youth are not available. However in 2009 the percentage of people classified as poor for urban and rural sectors were 5.3 and 9.4 respectively. These figures fare well in comparison to relevant figures during the previous two decades.

Table 3.4: Percentage of Population under Poverty Line

Sector	1995/96	2002	2006	2009
Urban	14.0	7.9	6.7	5.3
Rural	30.9	24.7	15.7	9.4

Source: Shun, et.al. (2011)

3.6 Teenage Pregnancies

Of all pregnancies, 6.4% were teenage pregnancies in 2006; sector-wise it was 6.4% urban, 6.2% rural and 9.8% estate sector. This is a health risk and infant-mortality and maternal-mortality rates are also correspondingly higher amongst teenagers.

3.7 Differently-abled Youth

Access to education for differently-abled youth is limited. However, the Government has introduced legislation that makes it mandatory for all public buildings and those for public use to have adequate accessibility and toilet facilities for differently-abled persons. Most of the youth in this category who

were injured due to civil strife have been accommodated in special facilities administered by the Government.

3.8 Youth Parliament

The Government of Sri Lanka has pioneered the establishment of a Youth Parliament in 2011 and recently hosted the Commonwealth Youth Forum and the World Conference on Youth, to facilitate international exchange programmes among youth. The youth parliamentarians are elected from among the members of youth clubs at divisional levels.

4. Responding to the Needs of the Aged

Sri Lanka is a country with an increasing ageing population as a result of increase in life expectancy and decrease in birth rates. This unprecedented demographic transition taking place in Sri Lanka will result in the old and young representing an equal share of the population. 'Elder' being defined as those above 60 years of age, the current elderly population constitutes 12.2% of the total population and is expected to increase up to 24% by 2040.

The increase in elderly population will mean a greater prevalence of disability and chronic illness demanding long term expensive health care facilities and other social support. Within the elderly population 33% are differently abled and out of the total disabled population 50% are elders. Taking care of the elders is a cultural trait and Sri Lanka ranks 36th in the global age watch index 2013 and is termed a "better off" country to live as an elderly person.

To face the challenges posed by rapidly aging population, the Government has taken several measures to protect the rights of elders including enactment of the Protection of Rights of Elders Act, establishment of a separate secretariat for elders and implementing numerous programmes to enhance the living conditions of elders in the country. The Act has made provisions for the establishment of a National Council for elders, a National Secretariat for elders and a National Fund for elders. This has provided the legal foundation for the development of a national policy for elders.

The principal function of the Council for the elders is to promote and protect the welfare and rights of elders and to assist elders to live with self-respect, independence and dignity. The National Secretariat for the Elders is the implementing arm of the National Council. The National Fund will manage funds allocated by the Treasury and donations, bequests and grants from other sources. Establishment of the maintenance board is a legal recognition of the existing Sri Lankan socio economic norms of caring for parents.

The national charter and national policy on elders were adopted by the Government in 2006 and 17 strategic interventions were grouped in terms of the three priority areas of elders and development, advancing health and well-being and ensuring and enabling a supportive environment as decided at the Second World assembly on Ageing. The national secretariat in collaboration with the WHO formulated a national plan of ageing in 2010 which has been developed in line with priority areas and strategies of the national policy. Activities, time frame and responsible partners have been identified in line with the priority areas and strategies.

Establishment of elders committees, raising awareness, day-care centres, pre-retirement seminars for a healthy and active life, counselling, sponsorship schemes, home care services, standards for homes for aged, identity card for elders, age friendly cities, mobile programmes pension schemes, social security for elders, public monthly schemes are some of the programmes established to enhance the living conditions of elders in the county.

5. Integrating Gender in Urban Development

Sri Lankan women are educated and faring better in comparison to the rest of the world in terms of health and gender equality. Equal access and rights of women have been assured in many areas such as education, employment, private enterprise, politics and administration. Accordingly they have not discriminated legally, customarily or traditionally by preventing them from getting involved in or enjoying the benefits of development. In fact women outnumber men in university admissions with 58.5% of University entrees in 2102 being women; the percentage enrolment of women in Government employment has been steadily increasing.

Table 5.1: Women in Public Sector Employment

Year	Male	Female	Female %
2006	164,011	62,295	27.5
2007	171,394	64,045	27.2
2008	171,058	64,773	27.5
2009	167,651	66,341	28.4
2010	167,263	67,035	28.6
2011	166,813	66,813	28.6
2012	164,246	69,588	29.8

Source: Department of Census and Statistics

Provisions have been made in the Constitution to ensure equal rights of people irrespective of their ethnic, religious and gender differences. However, some external factors such as extreme poverty, becoming the bread winner of the household, open market competition to get employment and/or to sell employment etc. are creating conditions of insecurity and exploitation among females.

Women are generally responsible for attending to domestic affairs, which include a variety of activities in addition to bearing and caring of children. In rural areas they have to spend time in collecting water, cooking, disposing garbage, cleaning and washing. Conditions have significantly changed in urban areas where most of these activities are now shared by men and women equally; in rural areas too conditions are fast changing.

Increasing attention has been focused on the status of women in Sri Lanka in recent years as a result of the declaration of International Women's Year and the UN decade for women and the consequent creation of a national machinery in the form of a Women's Bureau and the Ministry of Women's Affairs to initiate and co-ordinate programmes to improve the position of women. Introduction of a women's Charter ensures more access to credit for housing and entrepreneurship development activities, particularly for women in low income sector.

In line with the National Human Rights Action Plan and recommendations of the Lessons Leant and Reconciliation Commission, a number of programmes have been implemented in order to build a

safe and conducive environment for women. Establishment of a Women's-Helpline to provide easy access to complain on violence against women, the establishment of a national level data base and drafting a policy on women are some of the effective instruments recently initiated to further the women's position.

Various development programmes targeting the economic and social empowerment of women have been undertaken by the Government include those for economic empowerment of widows and women-headed families, home gardening and livestock, entrepreneurship development and self-promotion, counselling, empowering women in estate sectors, recognizing and strengthening women organization network, empowering of imprisoned women and life skill development and reproductive health.

6. Challenges Experienced and Lessons Learnt

6.1 Definition of 'Urban Area'

The inadequate definition of 'urban area' and 'urbanization' prevented a realistic assessment of urbanization trends in the country. This in turn interfered in planning for urban infrastructure and planning of local authority areas.

6.2 Civil Strife of 30 years

The ending of the civil strife that lasted almost 30 years has fostered a fresh look at inter-ethnic relations and respect for human rights irrespective of any differences. Certain deeply-rooted issues surfaced during these years and some may have left an indelible mark on the social fabric which may take several decades to erase. Some challenges faced include a significant number of women-headed families who are now forced to rebuild shattered homes without the help and support of the male. There are also families where the male head of household or grown up sons returned in a disabled condition. Government-sponsored assistance programmes are sometimes looked upon with suspicion and the participation of non-Governmental organizations, both local and foreign had to be harnessed in implementing such programmes. The retuning of some displaced families also posed an important challenge in human settlement development.

6.3 Inter-district Migration and Urbanization

There were 4 million people in 2012 who were living in areas different from where they were born; of these, 1 million were in Colombo district. The primary reasons for such migration were : 31% due to marriage, 20% for employment and 18% as accompanying a family member. However, it was also noted that most of these migrations were from urban areas to other urban areas thus the increase of net urban population remained rather static. The trend of urbanization is evidently different in Sri Lanka from that of other countries in the region. The quality of life in urban areas has been increasing steadily while the extent of issues intensified (such as traffic) but urbanization per se as understood in relation to other countries has been a slow phenomenon.

6.4 Urban-Rural Linkages

The continuing programmes targeting the development of rural areas and strengthening of urban-rural linkages have retained the urban-rural balance at sustainable levels. The relatively small size of the country and the well-distributed communication and transport networks have kept the rural-

urban migration at bay. Any attempt to change the structure needs to be carefully managed in order not to degrade or impoverish either sector at the expense of the other.

6.5 Population Expansion

The expansion of population is relatively slow; fertility (number of children born per females in productive age) has been decreasing steadily until in 1998 it reached the 2.1 level which is almost the replacement level. Since then it has increased to 2.3. In view of the high population density of the country fertility rates need to be low and keeping it at manageable levels is a challenge.

6.6 Administrative Lapses

Although the Government has introduced numerous laws and regulations to enhance the living conditions of the people, the implementation of such laws has been inadequate. There are still serious lapses in communication, inter-departmental and inter-ministerial cooperation and coordination and general attitudinal problems inherent in state machinery. Added to these are political and bureaucratic in-fighting that hamper or even subterfuge positive activities and programmes. The on-going discussion in regard to amending the Constitution may be an appropriate opportunity to review and include a dialogue to nullify adverse impacts of these undesirable situations.

6.7 Disparities in Educational System

The mismatch of educational qualifications and labour market requirements increase the youth underemployment and unemployment. The lack of financial wellbeing/income leads to social unrest, unlawful income generating activities, and substance activities/addiction among youth. Counselling and career guideline for youth has not been properly addressed and there is a high rate of internal migration of youth seeking jobs. There is a tendency that educated youth are starting up own enterprises. Vocational training has also helped the youth to embark on independent enterprises. However they face many difficulties in obtaining financial support of banks and other financial institutions in starting up on self-employment as they are expected to provide co-laterals to the financial institutions. The insufficient attention to youth in urban underserved settlements and other vulnerable areas by the responsible authorities also are among the challenges experienced.

7. Future Challenges and Issues in these Areas that Could be Addressed by a New Urban Agenda

7.1 Defining of 'Urban' and 'Urbanization'

It is imperative that a more realistic definition of 'Urban' and 'Urbanization' are formulated to suit the peculiar conditions of Sri Lanka. Given the situation that 96% of the area of the country is already electrified, 100% covered by mobile telecommunications and internet accessibility and the relatively high computer-literacy rate, it is possible to leap-frog into the next level of urban morphology where the boundary between urban and rural areas blur; and the definition of rural or urban signifies a frame of mind or an attitude. The UN-Habitat has already identified this phenomenon in developed countries where the concept of 'urban man' is emerging.

7.2 Raising the Mental and Physical State of People Traumatized by the Civil Strife

The caring of people who were traumatized by the civil strife is a two-pronged task; they need to be brought up to at least the average level reached by people of other areas; secondly, they need to be helped to move forward. Reconciliation and healing the mental wounds are other tasks which need constant and persistent efforts over a long period of time. Added to these is the necessity to rehabilitate those who became disabled and integrate them with the mainstream communal activities. Special problems of women-headed families may need extra care. Individual attention to each family may be needed to systematically elevate their economic status and conditions to acceptable levels.

7.3 Aging Population

By 2041 one person out of 4 will belong to the elderly category. Most of them will eventually be left alone unless looked after by children or family. In 2012 there were 5 widowers for each widow; if this trend is going to continue most of the elderly will be female. Their special needs have to be fulfilled and streamlined into planning and design disciplines so that the physical environment will be elderly-friendly. In 2012 for every 100 children below 15 years of age there were 41 elders; this will increase to 163 by 2041. Although when accompanied by the low birth-rates the total dependents may not increase significantly, the special requirements demand longer-term planning.

7.4 Persons with Functional Difficulties

8.7% of those above 5 years of age suffer from at least one functional difficulties relating to vision, audibility, cognition, independent self-care and communicability. While traditionally they played a role in the upkeep of the house and were looked after by the family, with the reduction of family size they are being confined to special facility centres. 29% of them claimed to be economically active and that can be extended to others as well if appropriate programmes are implemented.

7.5 Gender Ratio

The gender ratio has been changing over the last 60 years and turned women-dominated in 2001. By 2012 it has reached a 100:93 ratio and is likely to continue in the same direction. This can lead to issues such as an increase of unmarried women and reduction in robustness of the labour force. Cultural and attitudinal changes may be necessary but whether such can be effected in a conservative Asian country is a challenge to be faced.

7.6 Tertiary Education and Computer Literacy

Opportunities for tertiary education at university level are scarce; unless this situation is rectified youth unrest and under-employment will be ever-present stinging issues. On the other hand, computer literacy has reached 25% in 2012 from 12% in 2001 and is likely to increase exponentially. This augurs well in the evolution into an 'urban-man' society; however, policies and plans have to be formulated to ensure that opportunities are equally available in all parts of the country to ensure that there is no lop-sided development.

7.7 Disaster-prone areas

The national physical plan has identified disaster-prone areas along the coast and in the central parts of the country. Ironically these are the areas of highest population densities. In the event of a sea

level rise most coastal areas will be inundated; landslides are already causing damage to life and property and subsequently utilizing large financial resources in rehabilitation programmes. Formulation of policies and long-term strategies to redistribute the population in safe areas is a massive task needing urgent attention.

7.8 Migration

Migration to other parts of the country is rampant; the highest rate of 19% is in the Central Province which area incidentally is persistently plagued with landslides. To direct such migration in accordance with the national physical plan is a challenge that cannot be ignored. The proposed Western Region Megapolis Plan is likely to encourage migration from other parts of the country. Unless the implementation of the plan is simultaneously complemented by similar development initiatives elsewhere, issues of population management of an unprecedented scale can emerge.

Migration to other parts of the world primarily for employment has been a contentious issue and will be so in the future. 67% of such migration is to Middle Eastern countries mainly for unskilled jobs (i.e.85%). The educational levels of these migrants are relatively low: 28% with O/L and A/L qualification, 40% with only secondary education and 28% with primary or no education. Only 7.4% of these migrants are single-member families; all others have left their families behind mostly with young spouses and children. Severe family issues have been reported and the authorities have seriously considered curbing such migration to prevent a break-down of social structure.

The challenges are many and some are of vast scale requiring meticulous but flexible planning if the country is to steer safely through the challenges of a globalizing and urbanizing world in the face of unpredictable effects of climate change.

Chapter Two

Land and Urban Planning

8. Ensuring Sustainable Urban Planning and Design

Sri Lanka's natural resources are inadequate to cater to its development needs. Conserving resources and ensuring sustainability in planning, construction and maintenance are therefore of prime importance. In this regard sustainability is considered to be achievable at macro level as well as at micro level of planning. At macro levels, planning is undertaken at national level (national physical plan and planning policies) and at regional levels (regional physical plans based on national plan or area specific plans such as Mahaweli Development Plan covering the basin of the major river of Sri Lanka); micro level planning is done at local levels (based on regional plans) and at neighbourhood or settlement levels. National physical plan vigorously advocates the sustainable use of land and resources and long-term planning to effect a redistribution of population by directing the voluntary migrations within the country. It also insists that areas at risk due to effects of climate change must be declared as such and alternative designated areas must be developed to ensure that investments and resources are not poured into areas those are likely to get affected.

National and regional plans are voluntarily subjected to strategic environmental assessments (SEA) for sustainability and to verify that provisions to mitigate any adverse environmental impacts are included. Use of building materials in a sustainable manner is also taken into consideration. All large planning areas in any local plan are subjected to an Initial environmental evaluation (IEE) or for plans involving sensitive or severe environmental issues an environmental impact assessment (EIA). All projects exceeding specific limits are also subjected to either IEE or EIA. In certain areas especially for large scale projects an archaeological impact assessment is also mandatory to be undertaken. Extensive methodologies have been developed to incorporate disaster risk reduction (DRR) into urban plans. Persistent efforts by the Central Environmental Authority have succeeded in mainstreaming DRR into planning processes of major planning agencies.

In critical areas such as disaster-prone central hills detailed planning is undertaken by mapping out of vulnerable areas and planning of resettlement schemes for those whose lives are threatened. Land is one of the scarce resources of Sri Lanka. Accordingly land use planning has received high priority in the planning system. All land allocations are scrutinized by the district land use planning committee to verify its legitimacy in terms of inclusion in a duly-approved statutory plan and to ensure the judicious use of land.

Research into the use of alternatives to traditional building materials has been undertaken by the National Building Research Organization (NBRO) and the National Engineering Research and Development Centre (NERD). Use of sea sand instead of river sand is a direct result of such research. Similarly use of quarry-dust as an aggregate material has also been explored.

Standards for green buildings applicable to Sri Lankan conditions have been developed and these are widely used by planning and design professionals. Rainwater harvesting is mandatory for large buildings but in addition several settlements especially those located in areas susceptible to long dry spells have been provided with individual harvesting systems successfully. Detailed guidelines have been issued to the general public on ways to harness cool winds and natural lighting in their homes; locating of the houses and arranging of the land to facilitate natural drainage and minimise soil erosion have also been given. Planning guidelines have also been prepared in respect to layout planning of neighbourhoods to obtain maximum benefits from wind, sun and terrain.

9. Improving Urban Land Management, including Addressing Urban Sprawl

Land management in urban areas is closely tied to urban development planning. The strategies adopted by the Urban Development Authority (UDA) to effectively manage urban land relate to aspects of planning, regulation and standardisation. At urban planning level, land use has been regularised by the identification of zones for specialized activities. The footprint of buildings, floor-area-ratios, total allowable square areas and building height restrictions are imposed to keep a tab on intensity of activities of any area which has a direct relation to transport requirements. Land management is taken to the extent that the UDA is vested with the powers to negotiate with land owners in regard to changing the shapes of land parcels so that the buildings coming up on odd-shaped sites would not harm the visual image of the city.

Land sub-divisions done by private parties are also regulated by the specification of minimum plot-sizes, minimum/maximum number of plots per hectare, requirements of drainage, accessibility, etc. Land use for private or public housing developments are also regulated as to optimising of densities, provision of infrastructure, environmental services (such as waste disposal, drainage, sewerage, etc.) and provision of public amenities (playgrounds, community facilities, etc.) At the same time, access to education and health facilities is also insisted on. The object is to ensure that the management and use of land fulfils the expectations of citizens without compromising on the urban environment of the cities, especially due to transport-related activities.

Taxation as a major tool for land management in urban areas has been explored to a limited extent. Taxes are primarily related to assessment of value of land and buildings; a further consideration of the allowed use in terms of commercial, community, public and religious is made before the final taxed amount is calculated. However, neither taxation nor planning regulations have been conceived as incentives to build or provide what the city populace desires or to include public amenities in their project proposals. Certain projects, generally relatively large in scale bringing economic benefits (such as creation of employment, production of export-oriented goods) are granted tax holidays and tax reductions based on their income. Although such taxes are not connected with land, such incentives exert a huge influence on land management; but again such taxation has not been used to initiate effective land management processes.

Urban sprawl and vanishing agricultural lands continues unabated; the increasing value of commercial lands in city centres persuades residents to sell land in the city and move to outskirts resulting in desertion of cities and expansion of urban fringes. The greatest environmental issue of

this phenomenon is the disappearance of agriculture lands which acted as water retention areas and the consequent flooding during the monsoon season.

Several Public-Private-Partnerships (PPP) to reclaim extensive lands used by underserved communities by housing them in multi-storey (generally 10-12 stories) apartment blocks and sell the lands thus freed for mixed development have been implemented. Upto date more than 5000 such families have been relocated in the City of Colombo. The success of these ventures is yet to be seen. Concurrently several luxury-apartment blocks have also been constructed by the private sector. The exit of the middle class from the city leaving the rich and low-income families in the city could not possibly be desirable from a diversity aspect. Whether a government's desire for investment in apartments for the middle-income wage earners could offset this anomaly is again yet to be seen.

10. Enhancing Urban and Peri-Urban Food Production

The staple diet of Sri Lankans is rice; complementary food items are vegetables, fruits, meat, fish and eggs. Various sweetmeats are also prepared from rice-flour and flours of grains. Milk and dairy products are popular food items. Bread is also consumed and made from imported wheat flour. Sri Lanka became self-sufficient in rice in 1990s; vegetables and fruits are in abundant supply; however seasonal shortages have to be balanced with imported vegetables, fruits and potatoes.

Food security has been high on the government agenda for several decades. In most areas outside the Western Province food production is undertaken; however Western Province is one of the larger rice producing areas in spite of increasing urbanization.

Throughout the country, very close to the urban fringes and across the hinterlands are food production areas; this urban-rural landscape has been the perennial human settlement pattern that existed for several centuries and is not likely to change in the near future since planning at national and regional scales reinforce the pattern. In the dry zone a system of irrigation tanks connected by a network of canals provide water for agriculture. The real problem is not enhancing the food production but distribution; markets for agricultural produce and food processing are areas of investment having great potential in employment generation.

The "*pola*" system, a mobile village-fair making a circuit of locations is a popular source for fresh vegetables and fruits at low prices. The circuit includes not only villages but also centres of cities too. The day of the "*pola*" is a community-gathering day and serves as an activity that binds the community.

Demand for dairy products cannot be catered for by the local industry that produces only 20% of the requirement. The shortfall is filled with imports that cost Rs.44 billion in 2014. State-run cattle farms produce high-quality produce and have huge capacity for expansion.

A major programme in the efforts to enhance food production by increasing the productivity of land especially for paddy but also for vegetables too was the introduction of fertilizer in 1970s. Either the overuse or the toxic quality of fertilizer or both have resulted in contamination of ground water in dry zone which in turn affected the kidneys of the people, thus creating a crisis situation. The

reverting back to organic manure as fertilizer and the natural process of purifying the ground water is likely to take a long time.

11. Addressing Urban Mobility Challenges

Colombo's primacy was a main attraction for employment especially in the public sector since the early 20th century. In early days people used to travel from towns in the country-side as far as 100 kilometres and special trains operated from towns such as Galle and Kandy corresponding with the office hours. With the growth of suburbs of Colombo and the availability of motor vehicles, bus travel became popular. Today Colombo's population increases by 200% during daytime on weekdays from the influx of mostly office-workers. The gross inadequacy of bus facilities and the rise in social status is now forcing the middle classes to use their own motor cars and the traffic conditions in Colombo has deteriorated to such an extent that the average speed during rush hours has reached the level of 5 km/hr. The new registrations of motor cars jumped from 38,780 in 2014 to 105,628 in 2015 signifying an increase of 172%.

Table 11.1: Registered Motor Vehicles

Year	Motor Cars	All Vehicles	Motor Cars %
2008	381,448	3,390,993	11.2
2009	387,210	3,595,068	10.8
2010	410,282	3,954,311	10.4
2011	468,168	4,479,732	10.5
2012	499,714	4,877,027	10.2
2013	528,094	5,203,678	10.1
2014	566,874	5,633,234	10.1
2015	672,502	6,302,141	10.7

Source: Transport (n.d.)

It is a challenge to try to popularise the bicycle or even the motorcycle due to the climatic conditions of Sri Lanka and the social attitude associated with their use; hence the government stand on popularizing of bus travel; however even the introduction of luxury air conditioned buses could not dissuade the private car use in any significant way.

Table 11.2: Bus Commuters

Year	No. of commuters	% change
2010	933,746,167	-
2011	913,117,529	-2.2
2012	914,651,962	-0.1
2013	895,274,430	-2.1
2014	924,206,654	+3.2

Source: Transport (n.d.)

Some steps taken in the 1990s to widen existing roads merely eased the problem for a short time; the widened road became an attraction and soon was over-brimming. Construction of by-pass roads gave better results but these were implemented only in regional towns. The outer-circular road for Colombo City was planned in late 1990s and construction is almost complete. This is connected to the expressways and will hopefully divert a considerable quantity of traffic away from congested roads.

Table 11.3: Transport Sector Vital Statistics 2010-2014

Value of turn over	15% of GDP
Employment generation	1.5 million
Moving of people	10 million trips/day: 99% overland
Motorized vehicles	4 million
Fatal accidents	2500-3000 annually
Cost of accidents	Rs.30 billion per year
Cost of lost time in public transport	Rs.20 billion per year

Source: Ministry of Transport

Recently some experimentation to ease traffic congestion by making selected major roads one-way has been found to be fairly successful. These roads have been redesigned to accommodate parking bays and bus bays to regulate traffic without obstacles.

The mid- and long term strategy to control traffic within acceptable limits would be to manipulate land use to redistribute office areas among settlement areas so that bus rides would be shorter or walking to work could be a viable option. The plans to move administrative functions of Colombo City to Sri Jayewardenepura Kotte had this as one of the objectives. Once that plan is fully completed some respite may be expected. Future plans especially the Megapolis Plan will lay special emphasis on this issue.

The situation in regard to other cities is found to be the same; no city has been able to solve the traffic problem satisfactorily.

12. Improving Technical Capacity to Plan and Manage Cities

Planning of cities and towns is being done by central government agencies (Urban Development Authority UDA, Mahaweli Development Authority and the National Physical Planning Department NPPD) and by local authorities wherever planning powers have been devolved by UDA. In effect all plans are prepared by the government agencies because local authorities (with the possible exception of Colombo) do not have the technical capacity to do so. The Plans are prepared at regional offices where the complete range of expertise required to prepare a physical plan is not available. As such plans have to be whetted or completed by the respective head offices. The system requires that the plans get the approval of planning committees in head office and there are instances where the local authority disagrees with the plans approved in this manner.

Managing cities is almost exclusively a matter of local authorities with the UDA and Mahaweli Authority probably managing selected projects. Even in this aspect the local authorities lack the required technical, managerial and financial capacities. A major obstacle in this regard is the unreasonably low salaries allocated for technical cadres in the public sector.

The annual income of most local authorities is barely adequate to cover the costs of maintenance of public amenities; their capability to implement plans and manage the towns is very low. The economic turn-over of many towns is also at a low level and assessment taxes on land use are low. Income levels of local authorities are not likely to drastically improve in the short or even medium term. Unless the central government invests through an assistance programme, most towns would fail to manage themselves.

As far as planning is concerned, this system is likely to change with the proposed planning units to be established at Provincial Councils and the recruitment of qualified staff to such units. However unless a programme to ensure more funding to flow into local authorities is implemented, and the town or city economy grows, this inadequacy will persist into the future.

13. Challenges Experienced and Lessons Learnt

13.1 Deficient Planning System

In spite of a century of legislative planning since the promulgation of Housing and Town Improvement Ordinance in 1915, and in spite of several planning legislation and planning agencies, the planning system still has many uncovered areas on one hand and overlapping areas on the other hand. Although local authorities, conscious of their incapacity accept the planning authority of central government agencies, this is not a system that ought to continue into the future. We have witnessed many costly mistakes in planning due to the lack of intimate knowledge of the planning area; this is obviously the expensive price the nation had to pay by not strengthening the local authorities to undertake planning on their own.

13.2 Transport Planning as an Integral Part of Regional and Local Planning

Transport planning cannot be separated from regional or local planning; our bitter experience in this regard has taught that mono-centric development would not improve conditions; rather such a centre would ruin the regional urban structure. It is the distribution of several centres of attractions far and wide that would balance the system. This principle needs to be carried through national, regional, local and neighbourhood or settlement planning as well. Transport planning therefore is an integral part of the plan and not a cosmetic or utility added as an after-thought.

On the other hand, in Sri Lanka there is a social dimension in transport; the mode of transport has become an indicator of a person's success or otherwise in the climb up on the social ladder. Therefore ownership of a private car has become a status symbol other than just a utility item. While social attitudes are hard to overcome through a plan, challenge we face is to create conditions such that day-to-day travel to office and markets may be possible by walking or short bus rides.

13.3 The Obsolescence of 20th Century Planning Models

Many planning theories originating in the 20th century and still applied to modern planning are obsolete; some of them were conceived before the popularisation of the motor car and some before air-travel became common. None of them perceive global environmental crisis as a central issue. Almost all of them are pre-PC era and do not consider the immense potential of developments in the IT field. On the other hand we have observed that planning theories applied elsewhere do not necessarily succeed in this country. Whether we have been able to adapt these theories to suit our conditions is debatable.

13.4 Failure to Implement Macro Level Planning

Macro level planning has been practiced for several decades in this country. However its implementation has been sporadic. The national physical plan has highlighted the necessity to maintain high densities in designated urban areas and thus reduce pressure on forest lands. This has not been followed through in planning at other levels. The resulting undesirable conditions have generated gross disparities in social, economic and environmental conditions in various parts of the country, intolerable traffic conditions and human-animal conflicts claiming a large number of human and animal lives. These are all effects of inadequate land management systems that have been practiced.

13.5 Negotiations in Land Management

Our reluctance to adopt novel or proactive ways in land management and in property development, and our propensity to resort to regulation-based plan implementation has lost unknown instances where investment could have been used to enhance the public-friendly quality of cities. Many countries have negotiated with prospective developers to include public arcades, open spaces, etc. in lieu of relaxing certain planning restrictions so that the ensuing developments became a true asset to the city.

13.6 Isolated Planning

In most instances planning has been isolated; this was especially noted where the Board of Investment (BOI) granted extra concessions to investors willing to invest in regions outside the Colombo and Gampaha Districts which are almost saturated. However such concessions were not matched by other concessions provided in plans of other agencies; such as Education Department for improving schools in those areas, Health Department for upgrading health facilities, etc. The efficacy of the tax and other concessions granted by the BOI was greatly diminished because they failed to offer a complete package of economic, social and environmental benefits. This is only an isolated example of isolated planning but there are many other such instances of lost opportunities which could have increased the viability of local authorities, increased employment levels and reduced regional disparities.

14. Future Challenges and Issues in these Areas that Could be Addressed by a New Urban Agenda

14.1 Installing a Planning System

The biggest challenge in regard to land and urban planning is to install an integrated planning system covering economic, social, physical and environmental aspects with effective implementing machinery. The concept of “land” has to be as wide as possible to include even the biosphere to ensure that planning is not simply concerned with reduction of air pollution but also with the total air quality as well; include social, community and individual rights to ensure that planning accommodated such rights as the right to pure air, pure water, sunlight, privacy and happiness, traditionally reserved only for the affluent; only through such holistic planning can the issues of human settlements be confronted successfully.

14.2 Consistent Research Agenda/ database

A research agenda to answer questions regarding land planning and management issues needs to be prepared; such research needs to be widely available in a database that will also include metadata covering all aspects of planning. Exclusivity of government agencies has to be eliminated so that the planning efforts of all public and private entities would be based on a single source of information thereby ensuring that plans would not be contradictory but rather complementary to each other. Research agenda should also include monitoring of plan implementation and a feedback mechanism that would result in amendments of the plans periodically.

14.3 Strengthening of Local Authorities

The planning and management capabilities of local authorities need to be strengthened in a systematic manner consistent with the planning system to be installed. While ensuring their participation at national and regional levels of planning, their total commitment and control over planning at local levels need to be guaranteed by regulation. This has to be achieved while concurrent programmes to improve the technical and managerial capabilities of the staff and local councillors are also floated. Financial situation of local authorities need to be improved drastically by improved tax mechanisms and diverting investments to local authority areas, while simplifying the flow of capital from national to local level via the provincial councils.

14.4 Community Participation in Planning and Design

One reason for the reluctance on the part of planning agencies to accommodate community participation in planning is the vastness and complexity of the issues encountered; it is also due to a lack of imagination on the part of designers to create solutions catering for community needs. Although proactive design approaches such as incremental design have been developed and tested with encouraging results elsewhere in the Asian region, adoption of such solutions has been rare and isolated. A paradigm shift in focus needs to be inculcated within the design and planning professions for the planning/implementing culture to evolve into a more advanced system that is more responsive to community needs and aspirations. There is a precedent in participatory planning applied in the Million Housing Programme implemented in this country in the 1980s and early 1990s. A review of the programme with a view to adopting after making suitable adjustments to accommodate change in the 21st century is a challenge for the immediate future.

14.5 Implementation of the National Physical Plan

The national physical plan of 2007 should be considered as a guide to land management ensuring congruence within regions, balance between development-conservation and settlements to be disaster-free. The declaration and enforcement of certain areas as “risk areas” would decrease the proportion of population exposed to natural disasters as well as effects of climate change. On the other hand increasing the population densities in areas designated as Metro Cities would facilitate the provision of cheaper and better quality urban amenities. Streamlining the national physical planning guidelines into planning of all sectors is therefore of utmost importance and will be a challenge for the government.

14.6 Facing the Challenge of Transport

The depletion of fossil fuels and changing transport systems will exert a huge pressure on the nations in terms of making costly adaptations. At the same time the existing transport system is bursting at seams and, unless drastic solutions are found, likely to reach crisis levels. Planning based on easy mobility is an absolute necessity but the dividends of such planning would be forthcoming only in the medium and long terms.

The proposed Megapolis plan envisages the population in the Western Province to be 9 million as against the 6 million it is having now. How to manage the mobility of this kind of population is an unprecedented challenge for Sri Lanka. Since orthodox models available and proposed for emulation are based on systems emitting large quantities of carbon dioxide to the environment, we will have to face the challenge of formulating new systems which are environment-friendly. In this quest, methods of working at home, teleconferencing, etc. may be adopted into mainstream administrative procedures thus eliminating routine travel by as much as 75% or more.

Chapter Three

Environment and Urbanization

15. Addressing Climate Change

Sri Lanka is among the few countries whose carbon emissions are below the maximum sustainable levels. However effects of climate change will be felt in Sri Lanka probably in a big way since this is an island. The only options available are adaptation and mitigation. The legislative and institutional mechanisms for these purposes have already been established. The Climate Change Secretariat and the Disaster Management Centre are the key relevant agencies; however all planning agencies have built-in climate change resilience factor into their planning processes to ensure that this aspect is given due regard in plan preparation.

The air temperature of Sri Lanka has been increasing steadily at a rate of 0.2⁰C per decade over the last 22 years. This trend forces buildings to be air conditioned and thereby increases energy-usage. The air temperature during the months of March and September in some instances could be unbearable. The hitherto unheard of phenomenon of deaths due to heat-waves may be just around the corner.

The rainfall has not shown an appreciable change but the occurrence of intense rains falling over a couple of days has increased. Extreme wind conditions, storm surges, cyclonic storms have also increased over the past few decades. These are conditions having the potential to hamper fishery activities and thereby reduce fish production in the future.

The biggest threat that climate change would pose is sea level rise. The constant change of sea level rise predictions by the Inter-Governmental Panel on Climate Change has generated despondency and frustrates any attempt to tackle the issue.

Table 15.1: IPCC Predictions

Year	Prediction (m)
2001	0.4
2007	0.5
2013	0.8

Source: IPCC Assessment Reports, 2002,2008,2014

Approximately 4 million people are living in close proximity to the sea; several major towns are located on the coast with important public buildings such as hospitals, schools and tourist hotels which are likely to get affected. The infiltration of sea water into the country via rivers and streams and percolation into the soil would make the agricultural land infertile or reduce its productivity. This in turn would have an adverse effect on food production and agriculture-related employment. In addition, the sea water seeping into the ground water systems means that availability of potable

water for most areas would be reduced. In a world scenario where food and water supplies are in short-supply these changes are bound to be catastrophic for Sri Lanka.

Losing coastal land to sea level rise implies that land availability for human activities is reduced. If the costly infrastructure facilities which have been constructed in coastal areas are inundated, the country will be faced with an asset loss of gigantic scale. Since the two major wildlife sanctuaries are also located along the coast, land reserved for animals is also bound to get reduced. This will escalate human-animal conflicts already claiming human and animal lives. All these grave effects will affect human settlements and cities so adversely that Sri Lanka is likely to have a large number of climate change refugees.

The national physical plan has identified ways of managing the known effects of climate change by designating the coastal areas as risk areas and environmentally fragile. Additional areas for agriculture have also been identified. However, if the climate change effects become unpredictable and severe, as some scientists have warned, Sri Lanka should get ready to face a situation of acute suffering.

16. Disaster Risk Reduction

The greatest disaster the country faced during the last 20 years due to natural causes is the tsunami of 2004 that claimed nearly 35,000 human lives. Apart from that, cyclones, landslides, floods, droughts and storms have taken a toll on lives and property. The numbers of affected people is quite staggering; during the period 2010-2012 flood situations affected 48% of the population. Significant flood years were recorded 6 times during the decade commencing 2003. Similarly during the same period, droughts affected 25% of the population. The numbers affected by landslides is steadily increasing. These disasters have negative impacts on agriculture, livestock, irrigation, biodiversity, wildlife and hydropower generation.

Human intervention, environmental degradation, effects of climate change and rapid development activities have contributed to increase in the frequency of natural disasters. Natural disasters lay a heavy burden over the national budget every year. This includes damages incurred to public assets and emergency assistance to be provided to victims. During the period of 2010-2012 the estimated damage due to floods alone was around Rs.111 billion. The rising cost associated with natural disasters is not affordable in the long term.

Table 16.1: Persons Affected by Disasters

Impact	2013	2014	% change
Deaths/missing	140	154	10.0
Injured	225	80	-64.4
Affected population	574,130	2,702,545	370.0
Houses destroyed	741	5,312	616.1
Houses damaged	10,048	19,495	94.0

Source: Annual Report- 2014, Disaster Management Centre

To address this growing problem the Government has given priority in reducing the potential for losses before an event occurs. Accordingly disaster risk reduction (DRR) or hazard mitigation strategy has been adopted in planning. DRR profiles have been prepared for several districts as well as selected urban areas with funding from UN-Habitat. Incorporating disaster mitigation provisions is an essential part in the planning procedures of all major planning agencies. It has also been incorporated into local authority legislations, national health policy and national housing policy documents, as well as into the national planning process of the Ministry of Finance. In addition, several guidelines have been published for the use of the general public as well as planning agencies on ways to mitigate, reduce or eliminate potential disaster situations. The National Building Research Organization has introduced guidelines for hazard mitigation and codes and standards for design and construction of disaster resilient structures. Hazard maps for floods, landslides, cyclones and coastal hazard are being prepared and hazard profile on drought, flood, landslides, cyclones and coastal hazards have been completed and public are able to access the information freely. All planning approvals for constructions especially in disaster-prone areas are subjected to screening on DRR aspect. The national physical plan has also identified disaster-prone areas and specified restrictions on certain types of human activities those could aggravate the situation further. The Disaster Management Policy is in force and the awareness of disasters is high among the population.

Tsunami early warning systems have been installed and general announcements are made in regard to the sea conditions as warnings to fishermen. Regular tsunami-warning drills are also carried out to verify that the systems are in working order. In terms of rehabilitation, Sri Lanka's reaction to tsunami disaster has been cited as an example in post-disaster management.

17. Reducing Traffic Congestion

Traffic is a significant air-pollutant since almost all vehicles run on fossil fuels; in Sri Lanka even trains use fossil fuels. Therefore reduction of the number of vehicles on the road, reduction of traffic congestions and reverting to environment-friendly energy sources to power the engines of vehicles are considered as areas for intervention.

Number of vehicles on the road has seen a phenomenal increase over the last two decades ; the number of passengers crossing Colombo municipal area boundary by private mode of transport increased approximately 2.5 times while the number of passengers by public transport remained roughly static. The vehicle ownership in recent years also shows a surge in the number of passenger cars, three wheelers and motorcycles.

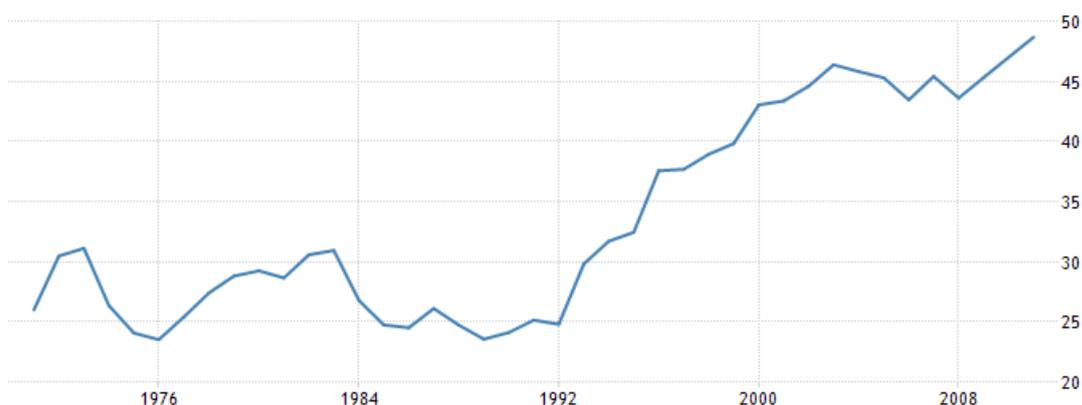
There are presently around 2.2 million motor vehicles estimated to be operating in the county. Of these around 50% are two wheelers, while three wheelers and other low horse powered vehicles constitute another 25%; only around 25% of the fleet are four or six wheeler vehicles. Buses used for public transport makeup around 22,000 in numbers, representing 1% of the fleet, while all forms of goods vehicle fleet has been growing at 6-8% per annum imposing severe pressure on roads in urban areas especially at intersections and for parking in busy town areas. All these vehicles consume an estimated 3000 million litres of refined fossil fuel in the form of petrol or diesel.

Table 17.1: Use of Fuel (annual sales volume in '000 tonnes)

Fuel Type	2010	2011	2012	2013	2014
Gasoline	616	709	750	786	835
Kerosene	165	168	142	126	121
Diesel	1709	1958	1990	1742	1996
Furnace oil	1016	1110	1210	703	786
Total	4000	4323	4504	3716	4102

Source: Department of Motor Traffic, 2015

Chart 17.1: Fossil Fuel Consumption as a % of Total Energy Consumption- Sri Lanka



Source: World Bank

The Government has expounded the view that improving the public transport system in urban areas will reduce the number of low occupancy vehicles entering the city and will in turn result in a reduction of traffic congestion and an improvement in mobility. Accordingly high capacity buses, exclusive bus lanes with priority at inter sections, bus rapid transits (BRT) and expansion and improvement of railway are being considered to attract more passengers to public transport. Improving the technical capacities of traffic control systems, promoting better road disciplines through demerit system, CCTV, license cancellation etc. are some of the strategies being introduced to reduce traffic congestion in urban areas.

The predominance of fossil-fuel based vehicles is an issue saddled with controversy. In the short-term the Government stands to lose on fuel-taxes if vehicles are run more on electricity. However use of hybrid vehicles is becoming increasingly popular. But on the other hand, the social perception that the possession of luxury vehicles which gulp down fuel in bulk as a status symbol runs counter to good environmental sense; possession of any motor car is actually looked upon as a milestone in a person's ascending up the ladder of success. The number of vehicles that line up in front of major schools to drop or pick up children, in some instance the number of vehicles almost equal the number of children, which is an indication of to what extent social attitudes could run counter common sense.

Table 17.2: New Registrations of Motor Cars- 2014

Fuel Type	No. of cars	% of Cars
Diesel	2,980	9.0
Petrol	10,231	31.2
Petrol/Electrical	19,557	59.5
Electrical	90	0.3

Source: Department of Motor Traffic, 2015

A massive infrastructure investment on construction of roads and expressways was undertaken by the Government since 2010; 9 flyovers and 11 bypass roads have been constructed while 3 flyovers and 15 by pass roads are either in the stage of being constructed, committed and proposed; a study is currently underway to identify the possibility of developing an elevated road network in Colombo. These activities saw the country's quality road infrastructure index improving from the 63rd position in 2008/2009 to the 48th position in 2012/2013. With the onset of increased economic activity, demand for adequate transportation via road networks has risen so that as of now the road network handles over 95% of the country's traffic.

However similar attention has not yet been given to environment-friendlier rail transport. The proposed Megapolis Plan envisages the development of Colombo and other main cities as green cities and developing systematic transport facilities based on BRT systems and minimizing traffic congestions as one of the main thrust areas identified in the urban sector.

18. Air Pollution

Sri Lanka is very fortunate that it does not yet have acute air quality problems in its cities. In Sri Lanka, the region which is most vulnerable is the Colombo Metropolitan Region (CMR) which encompasses the country's administrative and commercial capitals, with 80% of the country's industries and over 60% of all vehicles plying Sri Lankan roads.

Of the four sectors contributing emissions from petroleum derived combustion sources (transport, industry, power and commercial/household) approximately 75% of the pollutants released to the air (SPM, SO₂, NO_x, HC, CO) originate from the transport sector with emissions from other sectors, with one exception, being fairly low. That exception is sulphur dioxide of which the industrial sector accounts for nearly 93% of the total emissions. The National Environmental Action Plan (NEAP) (1998-2001) addresses the problems of air pollution under different sections such as industry, energy and mineral and environmental health. Within the urban areas of Sri Lanka, solid wastes, degradation of waterways, loss of wetlands are some of the major environmental concerns.

To avoid a disaster situation in this sector, the Government of Sri Lanka has taken a series of measures to mitigate the negative impacts of urban pollution. "The clean Air 2000" action plan that was established in 1993 is being gradually implemented and systematic air quality monitoring, particularly in the City of Colombo is underway. The National Building Research Organization (NBRO) has been entrusted to monitor and establish model air quality standards, and also to execute a continuous ambient air quality monitoring programme. They have fixed two stations in the City of

Colombo. Vital air quality and methodological parameters are collected and disseminated the public as well as to be used in regulatory activities by the Central Environmental Authority (CEA). Results show that the air pollution in the primate city of Colombo is continuously increasing at an average rate of 10% per annum. It also shows that the national air quality standards have exceeded acceptable levels for SO₂ and O₃ especially during the North East monsoon periods. It has also revealed that the average annual respirable particulate (PM-10) matter exceeds US-EPA standards.

The country's production of hydro-electricity could not meet the demand for electricity which was increasing at the rate of 10% per annum and led to the promotion of thermal power plants in city areas. It could significantly increase air pollution in the coastal urban centres. Spread of expansion of industries will also aggravate the situation.

The CEA has a well-equipped laboratory which is capable of carrying out extensive measurements in water quality, noise and vibrations. Analytical testing facilities are provided under commercial basis for those who need water, air, noise, soil and solid waste testing facilities.

In the control of ambient air quality, it is mandatory to control source emissions as well as non-source emissions. As a strategy for source emission control the CEA has finalized source emission control standards for Sri Lanka. These standards were approved to be applicable as interim standards until gazetted under National Environmental Act.

Vehicle emission testing programme is implemented by CEA to control air pollution caused by vehicles and spot checks are occasionally carried out on road side. In addition the mandatory annual vehicle emission testing programme and VET centres are monitored on regular basis.

Source Emission standards are being formulated at present and will be published as a regulation in the near future. However, at present source emissions are controlled by interim emission standards established by the CEA.

CEA is the national implementing agency for programme on Male Declaration on Control and Prevention of Air pollution and its likely trans-boundary effects for South Asia. With the use of passive samples, ambient air quality analyses are carried out at the sampling site and Dutuwewa for NO₂, SO₂ and O₃. Also measurements of particulate matter concentrations are being carried out on a weekly basis at Doramadawala Monitoring site.

19. Challenges Experienced and Lessons Leant

19.1 Climate Change

We have learnt that although Sri Lanka is not directly or indirectly responsible for causes of climate change, we will be affected by its effects. In this sense we are victims. The challenge is to find strategies to adapt or mitigate the effects of climate change. Another obstacle was the unpredictability of the data due to lack of accurate knowledge of the mechanism of climate change and its effects. The most reliable set of data from the IPCC is also to be trusted conditionally. Sri Lanka has mapped out its path to face the challenge and has created the necessary institutions to

plan and implement specific targeted programmes. The planning has commenced and we have progressed satisfactorily.

19.2 Tsunami

The tsunami of December 2004 was the biggest challenge the country faced as a natural disaster of a gigantic scale. However all groups, political and other, worked together as a team to attend to the matters connected with provision of immediate relief, temporary accommodation, interim accommodation and construction of permanent houses and community facilities. Responding to social issues of despondency, mental trauma, and personal loss of family members were also major challenges. Added to these was the legal problem of issuing death certificates to missing persons which was a necessary requirement to claim insurances. The creativity and flexibility of the administrative and political systems of the country and their ability to respond speedily and efficiently were tested in trying conditions. The generous assistance of international agencies such as UN Habitat and AusAid were forthcoming with their experiences in responding to disaster situations. We learnt the significance of being prepared for disasters and that time has come to accept the fact that we may have to resort to living in high density situations as a solution to land scarcity of the country.

19.3 Streamlining DRR into Planning Processes

The increasing frequency of natural or man-made disasters prompted relevant agencies to insist on streamlining DRR into planning processes of Government agencies. The experience we have gained in running the campaign has been successful since the NPPD, UDA, Mahaweli Development Authority and other planning agencies have by now incorporated DRR in their planning systems. However the reluctance of some persons to leave their traditional homes in spite of their being located in disaster-prone areas has been a daunting task that we have not yet been able to find a solution for.

19.4 The Private Car as a Status Symbol

No amount of knowledge or persuasion could overcome the social standard that the ownership and use of a private car is a measure of one's success in the rat-race of modern society. Though harmless on its own merit, it becomes an issue to be dealt with when the average occupancy of a car is only a fraction more than 01 and huge traffic congestions ensue. The experimentation with widening of roads, new roads, new expressways and air conditioned luxury public transport did not even scratch the surface of the problem of traffic congestion.

19.5 Air Pollution

It is not hard to accept that some pollution may be unavoidable on the road to development. However keeping it down to reasonable levels and safe for human beings is the challenge. Emission levels of vehicles were brought within the specifications of the CEA and the enforcing/ monitoring mechanism was established.

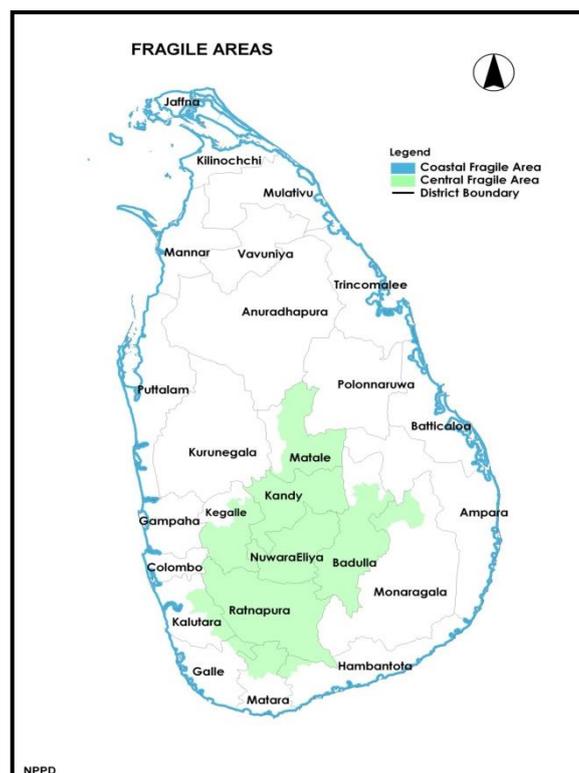
20. Future Challenges and Issues in these Areas that Could be Addressed by a New Urban Agenda

20.1 Managing Risk Areas and Fragile Areas

The greatest challenge in regard to environment and urbanization is to manage the areas designated as risk areas and environmentally fragile areas. These areas are already mostly developed and traditional attachments to these places will be a big impediment to the minimizing of the proportion of population exposed to disasters. However it is a challenge the country needs to succeed to prevent massive losses of human lives and wasting of colossal amounts in rehabilitation efforts. A prerequisite to success is the planning of development and conservation areas and commencement of the implementation of these plans.

At the same time controlling urbanization and the continuation of unsustainable investment in the central and coastal fragile areas needs to be strictly regulated. This kind of push-pull factors will redistribute the population in a sensible pattern in harmony with the natural circumstances and characteristics of the land of the country.

Map 20.1: Environmentally Fragile Areas



Source: National Physical Planning Department, 2011

20.2 Traffic Control

No answer has been found and tested to control traffic and maintain it at tolerable levels; however, the possibility of fossil fuels getting exhausted and the quest for newer and more efficient ways of mobility would, in the long term, force us to move onto novel, and hopefully better ways of

transport modes. In the meantime planning strategies and distribution of urban functions could ease traffic conditions in city centres. A certain degree of shift from private car to BRT systems can also be expected. Concepts of working at home which can be applied to some trades, such as IT, could also remove a section off the roads. An integrated strategic plan incorporating all the diverse systems needs to be implemented to reduce and curb escalation of traffic problem in the middle term.

20.3 Food and Water Security

The terrible prospect of worldwide shortage of food and water (which is almost a certainty now) and the possibility of Sri Lanka facing the same problem is a challenge the country will have to face sooner or later. Finding additional land for agriculture to counter the reduction of agro land due to sea level rise and protecting the upper catchment areas of rivers and streams will be some of the most important items in a new urban agenda for the country. The future picture painted by the IPCC report for 2014 needs to be taken seriously and a concerted effort made to ensure food and water security for the people.

Chapter Four

Urban Governance and Legislation

21. Improving Urban Legislations

The 13th amendment to the Constitution of Sri Lanka introduced a new structure of regional and local governance by establishing the Provincial Councils. At the same time Town Councils and Village Councils were abolished and converted to Pradeshiya Sabhas (Act of 1987). The adverse effects this provision had on census enumeration activities have been discussed elsewhere in this report. The Municipal Councils and Urban Councils functioned under the provisions of Ordinance of 1947 and Ordinance of 1939 respectively. The 13th amendment ensured that powers granted to local authorities cannot be reduced by Provincial Councils or any other entity.

The realization that local authorities lacked necessary muscle and flexibility on implementation of plans resulted in the appointment of a Presidential Commission of Inquiry on Local Government in 1999 to look into the “existing local government system, the defects and shortcomings and the reforms required to remedy such defects and shortcomings.” The Commission of Inquiry was also to study the necessary amendments “to have an effective legislative structure to ensure good governance at the local authority level,” and identify the “reforms needed to ensure effective representations of the peoples of the respective areas of authority of local bodies.” It was aimed at updating and reforming the three main legislations with the view of addressing the challenges faced by the local government, which include resource constraints, inadequate systems and infrastructure, limited scope in socio-economic development planning of localities and low revenue. The proposed amendments have updated several provisions which will address these constraints by according new responsibilities to the local authorities to widen their scope with powers, functions, functionaries, funds and other resources, which will ultimately lead to local government strengthening. Since the Report of the Presidential Commission was published, the Local Government and Provincial Councils Ministry had been engaged in consultations at regular intervals with the sub national levels of governments (provincial and local) on the suggested gaps, recommendations and necessary amendments put forward by the Commission Report. After a long process of consultation spanning over a decade, the Ministry is now involved in the process of collating all the proposed amendments to the main legal structure in order to update the existing legislations. In order to involve all stakeholders in the reform process, the Ministry embarked on its pioneer e-consultation, where the suggested amendments were posted on the Ministry website (www.pclg.gov.lk) for a wider public consultation. The suggestions and recommendations posted by all stakeholders were considered and incorporated as appropriate into the overall reform process. Furthermore, the Ministry held consultations with all three chapters of the local government sector since consultation is considered as an indicator of participatory governance. The existing laws of the local authorities specifies their mandate, which make them the authority of the area charged with the regulation, control and administration of all matters relating to public health, public utility services and thoroughfares. The proposed amendments recommend widening the functions of Local Authorities (LAA) by including socio-economic development activities and protection of the environment in their mandate. “Four new provisions namely, mandatory Committee System, participatory local planning, environmental

protection and Citizen's Charter had been incorporated to the existing governing legislation, with the objective of widening the scope of the Local Authorities according to the reports of the Local Government and Provincial Councils Ministry. "As per the Presidential Commission report, there was a necessity to expand the functional domain of the Local Authorities. This can only be achieved by giving legal binding to provisions. These new provisions are the current requirements of the society and there appeared to be a great demand from the civil society for same. The Committee System had been made mandatory for all LAA and the Standing Committee will facilitate coordination of development activities with wide citizen participation. According to the Committee System, there will be a Standing Committee on Finance and not less than four other Committees with members drawn from the Council and citizens to advise the Pradeshiya Sabha (Rural Local Authorities) on its duties, responsibilities or any other matters.

22. Decentralization and Strengthening Local Authorities

New provision had been introduced on local planning where a Local Authority undertakes development and physical planning. The development plans cover a wide spectrum, which include infrastructure development, development of a medium term plan for five years as well as annual development plans in collaboration with the Divisional Secretariat and other relevant Governmental and non-Governmental agencies. Under the physical planning, the new amendments encourage the Local Authorities to formulate zoning schemes and urban development schemes in collaboration with the National Physical Planning Department and the Urban Development Authority. The LAA will be responsible for ensuring the implementation of physical planning by facilitating the enforcement of regulatory measures relating to land utilization. One of the notable features of the amendments is the inclusion of civil society and citizens in participatory planning. The concept of "Citizens' Charter" is introduced into the local government system as a measure of good governance practice. The Charter will specify the different categories of services rendered by the Local Authorities, the conditions and time frame within which such services will be performed and completed. The Charter aims to reduce the gap between the Local Authority and the citizenry (the governing and the governed) and bring them closer in understanding the duties and responsibilities of each other. The proposed amendments further attempt to enhance the powers of the Local Authorities by promotion of agriculture, minor irrigations and animal husbandry, which will allow the LAA to conduct experiments in agriculture and animal husbandry. The Pradeshiya Sabhas will be able to promote local tourism and will have the ability to run eco-tourism and tourism-related projects, establishment and maintenance of ayurvedic dispensaries, herbaria and the power to grant any person, firm, company or corporation for any purpose, a license of concession. With the existing nature of Sri Lanka's democratic system, there is dependency on the national and sub-national levels of Governments by the local government for decision making, resources, revenue, etc. Thus, policy interventions by these two levels of governments are essential to bring about any change to strengthen the local government system. The proposed legal amendments have undergone many rounds of consultation among the local and provincial authorities, civil society and local government practitioners. As the local government is a devolved subject as per the Constitution, the final draft amendments had been presented to the Provincial Councils for concurrence.

23. Improving Participation and Human Rights in Urban Development

The proposed amendments aim to strengthen the participatory approach in local government by affording to the citizens the opportunity to voice their concerns regarding any plan or project proposal; people-participation would not be limited to just voting at an election.

Human rights have been enshrined in the Constitution as applicable to all citizens in all activities (barring security concerns). Discrimination on the base of race, caste, sex, religion, or ethnicity is outlawed and special human rights commission has been established to consider any complaints; free legal assistance is also available. With special regard to urban development the National Involuntary Resettlement Policy ensures that involuntary settlements result in better living conditions to the settlers. In all resettlement schemes (both residential and commercial) the views of stakeholders are taken into consideration. While not all the demands of re-settlers are met, still the provisions of National Involuntary Resettlement Policy are enforced.

Special regulations are also applied to buildings and public spaces to guarantee the rights of the disabled and the aged to enjoy such buildings and spaces. Access to education and employment is granted to all alike and there are hardly any difference in relevant figures for males and females.

Table 23.1: Access to Education and Employment- Gender-wise

	Male %	Female %
Literacy*	93.5%	91.6%
Employment**	97.1%	92.1%

Sources: *- Central Bank Annual Report 2014

** - Department of Census and Statistics 2015

The rights of pregnant women have been protected by several laws and regulations: in addition to 180 days of paid leave, another 180 days at ½ pay and another 180 days of no-pay leave are also allowed. Pregnancy out of wedlock is no longer considered as a reason for dismissal from employment.

24. Enhancing Urban Safety and Security

There are many reasons for the existence of insecure urban environments; apart from poverty, the rich-poor divide is a prime mover for crime. The constant prevalence of advertisements over television, social media, internet and digital screens in the city with images of luxurious living styles and the enticing glitter of an opulent consumer society has been irresistible for the vulnerable youth who, when denied the opportunities for higher education or employment would tend to commit crime. Drug abuse that clouds the mind is another cause for criminal behaviour. Unfortunately, the modern cinema meticulously shows how to use new technologies to commit crimes thus setting a bad example on the impressionable youth.

Urban planning has a limited scope in the prevention of crime and making the city safe. Zoning can be used to ensure that no area becomes isolated during night time; street layouts and urban design can prevent blind spots; in housing settlements culs-de-sac have been found to be inhibitive for criminal activities; adequate lighting conditions could be provided to discourage criminal activity. Administratively, police security may be arranged for areas likely to be unsafe. Many areas in the City of Colombo are covered by CCTV cameras and these have been proven to be effective in deterring criminal activities.

Another aspect that disturbs the safety-situation is road accidents; most accidents involve motor cycles and three-wheelers and the number of fatal accidents has been marginally increasing over the years. Several cases of erratic and drunken driving have also claimed lives or inflicted body damage to pedestrians. Punishment in the form of fines and/ suspension of driving licenses for drunkenness and other road offences have been drastically increased recently to control the situation.

Table 24.1: Unsafe Traffic Conditions Sri Lanka 2013

Reason	No.
Driving after alcohol/drugs	30,117
Speeding	34,866
Without License	146,836
Without protective helmet	129,109
Un-road-worthy vehicle	1,030
Smoke emission	6,990

Source: Traffic Branch, Sri Lanka Police

The “war-architecture” that was all around Colombo and other cities is now slowly disappearing; the high boundary walls are being torn down and cities are again becoming pleasant places to the eye. These are signs of a sense of safety and security and that is not solely due to the end of civil strife.

25. Improving Social Inclusion and Equity

Cities in developing countries cannot be socially fully inclusive simply because there is no dominating middle class; the class differences will prevail. As such in Colombo and other cities, there are many exclusive facilities reinforcing these divisions. The exclusiveness is maintained by way of exorbitant membership fees (such as in sports clubs) or expressly dedicating to foreign passport-holders. The differences in culture, attitudes, even the languages used are so incompatible that there is no chance of the different classes mixing up in such places. Another place these differences are accentuated is the lodging; the cheap hotel rooms of Pettah in the heart of Colombo generally used by the hour or over-night stay are contrasted with luxury star-class hotels just a kilometre away; there are hardly any lodging facility in between these two extremes. Many bus services from distant places are scheduled in such a manner that people can arrive in Colombo early morning and leave by evening after attending to their business thus not requiring to stay the night in Colombo.

However, there are a few places where the classes happily mix; one is the Galle Face green, a large open turf ground adjoining the beach in Colombo; this was dedicated to the ladies and children of Colombo by the British rulers in the 19th century and still remains so although men are also using the ground; another is the recently established open spaces in Sri Jayewardenepura Kotte adjoining the City of Colombo with food-courts and garden space for people to meet and relax. Some walking tracks constructed in main cities during the last decade are also attracting people from all walks of life.

Some efforts by the government to improve social inclusion did not succeed; “night-light” programme of the Colombo Municipal Council to attract all classes of people to selected spots was a failure and had to be abandoned. The Colombo beautification programme commenced in 2011 cleaned identified areas and removed incongruous buildings and structures and restored 19th-20th century buildings of European architecture. However the financial returns expected made the facility beyond the reach of the middle classes.

Equity in housing design has not been achieved in urban areas. The designs for luxury apartments contain higher standards of space arrangements than those for middle and low-income classes. Whereas the former are afforded with privacy and private balconies, the latter do not sometimes even have balconies denying the occupants the right to enjoy fresh air and open space.

Equity in terms of gender has always been a norm in Sri Lanka, the country that elected to have a woman prime minister before any other nation. However as long as income disparities are widespread social inclusion cannot be achieved.

26. Challenges Experienced and Lessons Learnt

The Constitutional amendment that was instrumental in the establishment of Provincial Councils was meant to devolve powers and functions specifically identified in a list on the provincial and local administration. However the uncertain approach of the Central Government prevented the Provincial Councils being an effective machine in solving the regional issues. This is now being rectified by transferring more powers to the local authorities; however, it is apparent that had the centre been more considerate in granting powers to the regions, the country would have benefitted more.

The international post-conflict peace consolidation system recognized by the UN of disarmament-demobilization-reintegration (DDR) for combatants who had fought in war-situations could have been adopted and followed before discharging personnel from armed forces. The absence of the psychological readjustment needed before returning to civilian life makes men violent and prone to criminality. The country had to endure episodes of robbery and sporadic violence due to this omission.

The situation in regard to drivers respecting the right of way of pedestrians at pedestrian-crossings vastly improved after the Police decided to crack down severely on offending drivers. This has

improved the safety of pedestrians and is an indication that if road rules are strictly enforced the city could be a safe place for all.

The beautification programme of Colombo, although was conceptually an attractive idea was not economically sustainable. Since the government did not want to subsidize on the investment, the project became an exclusive elite venture. The demerits of prime locations of the city thus becoming the haunt of an exclusive group are plainly visible as a lesson to be learnt.

A major challenge that the city was confronted with was the underutilization of valuable urban land by underserved communities. The solution that was implemented was to rehouse the families in multi-storey apartments at or near the same location and free the land for commercial development thus making the project self-financing upto a certain extent. The apartments thus constructed may be considered as basic; the argument being that as and when the financial standings of the occupants grow, things could get better and the apartments could be pulled down and replaced with better ones. That approach however is at variance with sustainable development objectives. A more satisfactory answer to this dilemma is yet to be found.

Apparently social inclusion is a condition possible in an ever-expanding middle class; as long as wide gaps exist in social culture and finesse as a consequence of income disparities, a high degree of social inclusion may not be possible; it is seen that the situation is far better now than it was several decades ago; with increasing income levels, eventually conditions ought to improve.

27. Future Challenges and Issues in these Areas that Could be Addressed by a New Urban Agenda

The greatest challenge in terms of local governance is to have a well-knit system of national, regional and local government tied up with various planning and implementing agencies and line ministries. The administrative and financial network within this system should be efficient and flexible enough to accommodate specific conditions.

In this regard there are several institutional challenges that urban development for inclusive growth should necessarily address.

- Establishing a long-term vision for urban development at the provincial level planning and development
- Strengthen the role of the Province to enhance regional coordination among ULAs
- Introduce mechanisms for institutional coordination in the provision of urban services bringing ULAs into the mainstream of urban development.

Another challenge would be to formulate a strategy and plans to solve the issue of particular rights an occupant of a so-called low-income apartment building ought to be granted such as the right to privacy (especially in the case of women). The different set of rights enjoyed by different classes is obviously not conducive to the creation of social inclusive conditions. However, the issue is very complex and involve financial, environmental and ethical considerations.

Improving social inclusion in general is rooted in rich-poor dichotomy; the challenge is to find how and why certain urban spaces score well on this account and some do not. Improving and enhancing the city economy is also an essential part of a mid and long term programme to bridge the gap between urban rich and poor. It is also relevant to curbing crime and violence in the cities. The long term vision of cities should encompass the financial aspect to be able to address these issues.

Containing the drug abuse is one of the most critical challenges for the next two decades. In addition to the financial mess the drug abuser is getting into, it saps the best in the youth thus robbing the vitality and exuberance of a city community. Unfortunately the law enforcement agencies have not been able to crack on the real traffickers. Although capital punishment is meted out to offenders, in practice that punishment is never executed.

Chapter Five

Urban Economy

28. Improving Municipal / Local Finance

The vision of urban development is a systematic network of settlements and cities in the country which are linked with each other, providing a high quality living environment for the people. The reality should be not only economically feasible but also socially and environmentally sustainable. The continuation of not only the urban-rural disparities but also urban-urban disparities indicates that there are imbalances in economies at regional and local levels. "Economy" in this context is interpreted in the wider sense of the word; i.e. state of a country or locality in terms of the production and consumption of goods and services and the supply of money; or careful management of available resources. Therefore the wide disparities can be attributed to the lack or inadequacy of technical and administrative skills in the local authorities and the insufficient supply of money.

Ironically, efforts aimed at strengthening the local authorities have not been very successful. Allocations to local authorities are still meagre; cadre positions granted to them are quite inadequate in terms of quantity and quality; these two factors have made local authorities incapable of handling the work they should actually be doing. This result has been used on the other hand as the justification to impose limitations for the scope of work they are empowered to do. It is a vicious cycle that allows the centre to continue to dominate, or worse by-pass local authorities.

However if urban areas are to have a thriving economy the local authorities must be made responsible for the development of their areas. It is difficult for the central government agencies to manage the local economies in a proactive manner which is a prerequisite to a revitalized urban economy. The proposed amendments to the Constitution and local government laws need to address these issues and ensure that local authorities are adequately provided with the resources they need to build up a vibrant urban economy in their areas. It is an undeniable fact that local authorities are best placed to monitor the status of the environment but such potential is not fully harnessed; as such their role in regard to the environment needs to be emphasized in the proposed amendments. Unless that is done, and local authorities are empowered to manage their own economies, local authorities' role will be restricted to maintenance of infrastructure and collection of garbage.

29. Strengthening and Improving Access to Housing Finance

Early urban growth in Sri Lanka has been mainly due to migration from rural areas, mostly to the Western Province driven by the port-centred metropolis of Colombo. Colonial history has added concentrations of urban settlements along the coastal areas resulting in a major share of urbanization taking place in coastal cities and towns. At the same time the thrust of equity-based service delivery programmes for basic services such as education and health as well rural housing

and other forms of rural development to uplift rural communities and to eliminate large urban-rural disparities in human settlements, has led to urbanization based on the growth of small and medium size towns as service centres among the rural hinterlands.

Housing being one of the highest concerns in urban areas, Colombo was also saddled with a slum and shanty problem several decades ago. It has been addresses to a large extent and the intention of the Government is to reach about 65,000 families still living in underserved settlements.

The housing sector in Sri Lanka is financed by both Public sector as well as the private sector. The two state commercial banks, the Bank of Ceylon (BOC) and the Peoples Bank (PB) together with the State Mortgage and Investment Bank (SMIB), National Savings Bank (NSB) and the Housing Development Finance Corporation (HDFC) provides the bulk of the financing requirements of housing at present. The SMIB established in 1931 is considered the leader in this sphere with a housing loan portfolio in excess of Rs.5.0 billion.

The private sector on the other hand entered the housing finance industry relatively late. Hatton National Bank (HNB), Commercial Bank, Sampath Bank etc. have now started to expand their share in the housing finance sector.

It is generally considered that the public sector grants loan at a relatively lower rate than the private sector. However, the rates vary from about 15% p.a up to about 22% p.a and the payback period too ranges from approximately 5 years up to maximum of 25 years and even loans as small as 25,000/= are granted by these financiers.

The National Housing Development Authority (NHDA) is the only state institution granting housing loans mainly to the disadvantaged groups in Sri Lanka. There are three main Housing Programmes implemented by the NHDA for the low income earners across the country namely;

- Model Villages Programme
- Reawakening Villages Programme
- Scattered Loans Programme

Rising Cost of Housing Construction

It is important to consider the escalation of housing costs in forecasting future housing construction as well as the disaster resilience of houses. Taking a sample case during Tsunami reconstruction, the field sources revealed that initially a house of 500 sq.ft. could be built for Rs.350, 000; however, after three years, the cost of construction had increased to Rs.700,000–900,000. Therefore, inflation/demand for raw materials in the next few years should be carefully considered in forecasting housing construction.

Urban Sector Settlements

There is a high demand for settlements in the urban sector. However, as there is a scarcity of land in these areas, alternative solutions should be considered. A tendency has emerged to build apartment blocks of 10-15 floors especially for higher income groups; but the trend is catching up within the middle income groups as well. There is also a problem of congestion in urban areas and issues with the provision of basic services such as water and electricity. If these services can be given to all

sectors (urban and rural) then people would be willing to move out of urban areas as evidenced by the decreasing population of Colombo.

The Government recently embarked upon an exclusive programme to provide middle-income housing at nodal points along expressways and railway lines through private sector participation.

30. Supporting Local Economic Development (LED)

According to the World Bank definition, LED is about local people working together to achieve sustainable economic growth that brings economic benefits and improves the quality of life for all sectors in the community. The ultimate goal of LED is to create decent jobs and stimulate economic activities. However in Sri Lanka some tell-tale signs indicate that a gross defect has infested the system; some districts those make a significant contribution to the national economy occupy high positions in the poverty list. For instance, Nuwara Eliya that was the 4th highest contributor to GDP was the 5th poorest district in the country. This is the result of certain malignant features of local economy:

- Local work is executed by contractors from other districts so that the profits flow outside; the district gets some profits from local sales but neither the financial benefits nor the experience needed for capacity building purposes is acquired by the district;
- In tea and rubber growing areas companies operating from Colombo own the plantations and the profits flow to Colombo; the local community gets the meagre pay and some sales;
- The national and international demand for some products is not reflected in the quality of life of those engaged in the industry; a case in point is the cinnamon industry that produces 70% of the world consumption without making the workers living conditions any better.

Traditional local industries have now become limited to cottage industry level; their produce is not in general use but are just curios bought by tourists as mementos. Sri Lankan people hardly use clay pots, straw hats, coir rope, coir doormats, coir carpets, coconut spoons, etc. Aluminium pots, pans and spoons and plastic or rubber goods have replaced these environment-friendly products. The people engaged in these industries earn only a subsistence level income.

There is obviously no effort to improve the finish of the traditional goods; nor a programme to add value to products; nor for creating fresh markets.

However it has been noticed that in some districts local entrepreneurs, businessmen and even civil contractors have organized themselves into business chambers and industrial chambers to solicit and win contracts for them. There are some government agencies, such as the Construction Industry Development Authority (CIDA) which has long term programmes to get contractors registered under a national registration and grading scheme and thereby get them into the mainstream economic framework. Special training courses are conducted to improve the skills in project management, contract documentation, quality control, etc. Organizations such as the Ministry of Small Industries Development, Small Business Development Division, and others have provided technical assistance, while banks, community development organizations, and local governments have provided credit access. However, the acceptance of entrepreneurship as a development force by itself and the

above mentioned conventional supportive mechanism will not be acceptable to economic development or advancement of enterprises which are scattered in rural areas. It is becoming evident that entrepreneurial support requires more than these basic tools.

Table 30.1: Salient Features of the Gross Domestic Product (at current market prices) by Provinces – 2010¹ and 2011²

Item/Province	Year	Western	Central	Southern	Northern	Eastern	North Western	North Central	Uva	S'gamuwa	Island
GDP (Rs.Bn)	2010	2,513	563	599	190	334	535	267	253	351	5,604
	2011	2,905	644	727	241	375	652	300	292	406	6,543
GDP Growth (%)	2010	13.4	18.9	17.7	21.8	19.5	14.8	20.6	15.5	19.1	15.9
	2011	15.6	14.5	21.4	27.1	12.4	21.9	12.4	15.5	15.7	16.7
GDP Share (%)	2010	44.8	10.0	10.7	3.4	6.0	9.5	4.8	4.5	6.3	100
	2011	44.4	9.8	11.1	3.7	5.7	10.0	4.6	4.5	6.2	100
Per capita income ³ (Rs '000)	2010	428	209	240	159	214	228	215	191	181	271
	2011	491	237	289	200	237	276	239	218	207	314
Per capita income ratio ⁴	2010	1.6	0.8	0.9	0.6	0.8	0.8	0.8	0.7	0.7	1.0
	2011	1.6	0.8	0.9	0.6	0.8	0.9	0.8	0.7	0.7	1.0

1. Revised
2. Provisional
3. Calculated using mid-year population estimates prepared by the Registrar General's Department
4. Ratio between per capita income of the province to that of all Island

Source: Central Bank of Sri Lanka

31. Creating Decent Jobs and Livelihoods

Small and Medium Enterprise Sector Development Programme of the government has identified the major constraints that are critical for the SME development in Sri Lanka. In addition, it discusses both policy level and industry level constraints including adverse economic policies, inadequate market demand, problems of access to credit, problems of raw material supply, rigid and unfavourable regulations, lack of infrastructure and utilities, lack of business development services and lack of information.

The government expects that its economic strategies would create one million employment opportunities over the next 5 years. The issue would be not so much the number of jobs but the quality of jobs and the remuneration. A case in point is the dearth of persons entering the construction industry. The rugged working conditions and the relatively low social status accorded to plumbers, painters, carpenters, etc. have made construction related jobs unattractive particularly to the youth from middle income backgrounds. As it is, only persons with low educational achievements from relatively poor backgrounds are most likely to enter the industry. The CIDA has

formulated programmes to raise the skill levels of them and also give them the dignity of earning a diploma. There are two advantages in this scheme:

- It provides a qualification scheme that recognizes skills attained providing them mobility in employment prospects
- It enables upward career progress up to sub-technical and technical levels facilitated by the NVQ scheme

Providing a long term Insurance with pension benefits to construction workers is another action proposed. Under the provisions of the Construction Industry Development Act, a Long Term Insurance Scheme, with pension benefits to people to be implemented for the craftsmen registered with the CIDA who are not entitled to any form of retirement benefits under any other scheme. An award ceremony is also held where the best painter and best carpenter get awards on the same platform as the best engineer and best architect. The effects of the efforts of the government to upgrade the status of the construction industry employment are yet to bear fruit.

Table 31.1: Unemployment Rates

Year	Male	Female	Total
2009	4.3	8.6	5.9
2010	3.5	7.7	4.9
2011	2.7	7.0	4.2
2012	2.8	6.2	4.0
2013	3.2	6.6	4.4
2014	3.2	6.5	4.3

Source: Central Bank

The issue with the construction industry is the non-availability of a clear path of career advancement; since this belongs to the informal sector, with irregular work it does not afford the guarantee of a sizeable amount of savings getting accumulated over time. The youth seems to prefer even menial jobs in countries such as Korea and those in the Middle East which offer jobs those would enable them to save Rs.6- 10 million over a 5-year period; these jobs are attractive enough in spite of the low level of the work. However, the hardships they have to bear and in certain cases the callous treatment they get from employers are enough reasons to determine that these jobs can hardly be called decent.

Table 31.2: Foreign Employment

Employment		2012	2013	2014
Total placements (nos.)		282,447	293,218	300,413
By gender	Male (%)	51.0	61.6	63.2
	Female (%)	49.0	38.4	41.1
By category	Professional (%)	1.6	1.8	1.8
	Middle level (%)	3.3	5.6	6.9
	Clerical (%)	5.7	9.1	9.7
	Skilled (%)	23.8	25.1	24.3
	Semi-skilled (%)	1.2	1.2	1.3
	Unskilled (%)	22.3	24.2	26.4
	Housemaid (%)	42.1	33.0	29.5

Source: Sri Lanka Bureau of Foreign Employment

32. Integration of the Urban Economy into National Development Policy

“Urban economy” in the Sri Lankan context may be defined as the economy of urban activities; this is because there is an ambiguity in regard to the definitions of “urban” and “urban area” and using the conventional definition of “urban economy” to mean “economy of urban areas” would be arbitrary; indeed, in a situation where the boundaries between urban and rural blur and become indefinable, this is the only meaningful definition we can adopt.

Accordingly urban economy encompasses all non-agricultural activities which was slightly over 90%; the industries portion being 33.8% and service component being 56.2%. The goals of integrating these sectors into a national development policy are to increase incomes and gainful job opportunities by restructuring the sectors and distributing them spatially so that regional disparities would be minimized.

Sri Lanka has become a middle-income country, with per capita gross national income of \$3625 (2014). Its economic geography is characterized by the concentration of economic production in the Western Province (WP) and its urban concentration has been accompanied by higher economic density and higher productivity. The WP has seen its population climb from 3.9 million in 1981 to 5.8 million in 2012, equivalent to 35% of the national increase. While the WP covers only about 6% of the land area of the country and has 28% of its population, it accounts for 45% of GDP and 73% of industrial value added. The second- and the third-highest contributions to GDP are from the Southern and Central Provinces, far behind at 10.7% and 10% of GDP respectively. Per capita income in the WP is 1.5 times national per capita income (2014). Most of Sri Lanka’s foreign trade passes through Colombo Port in the WP, and it generates much of the capital, human resources, technology, and advanced services to drive economic growth and job creation in the rest of the country.

In view of the primacy of the Western Province the present Government established a Ministry for Megapolis and Western Development in 2015. A Megapolis Development Authority is currently being formed.

Economically, Colombo’s competitiveness is unenviable; in the world city rankings of The Economist, Colombo ranked at 102nd position in 2012 and according to predictions in 2025 it will fall to 108th position. The term “competitiveness” indicates a city’s ability to attract capital, talent, visitors, and businesses. The ranking is based on the recognition that to truly become globally competitive, cities need to develop soft infrastructure – including institutional effectiveness, social character, financial maturity, and global appeal, in addition to physical infrastructure. Colombo’s low score is driven largely by the city’s low financial maturity compared with world-class cities.

The major project-based thrust areas of the government’s development plan for the next 5 years need to be weighted in the context of this background. These include:

- Western Megapolis Plan covering the whole of WP targeted to accommodate 9 million persons, i.e. 36% of the projected population of 25 million by 2040;

- 45 economic zones of manufacturing, IT and other services and tourism;
- 11 Industrial and Technology zones;
- Tourism development zones;
- Sustainable renewable energy production zones.

These are distributed over all regions of the country having due regard to their environmental sensitivities, availability of resources, labour and land. The national physical plan, prepared in 2007 during the civil strife is being revised to incorporate these proposals. It is expected that the local authorities, especially those almost totally dependent on agriculture would get a boost to their flagging economies by the infusion of urban economic elements creeping into their areas. If such enrichment could discourage the youth from seeking menial work in other countries, that would restore and enhance the social and economic framework of the regions.

33. Challenges Experienced and Lessons Learnt

One of the significant lessons learnt since the 13th amendment to the Constitution in 1988 is that it was inapt to have relegated the role of local authorities. No adequate attention was given to the strengthening of local authorities in terms of skills development, financial assistance or even getting their involvement in large projects; the results were wavering local economies, underemployment and increasing disparities in regions; and migration pattern among the youth seeking menial jobs in foreign countries was a result of the stagnant local economies. If the central government expected to keep local authorities under control by by-passing them and implementing only what the central government wanted to do, while allowing them to attend to minor matters and maintenance, it was proven to be a case of self-defeat.

The tsunami of 2004 posed three challenges: catering for the sudden increase in demand for construction materials, finding craftsmen and technicians in adequate numbers and (partly because of these two issues) containing construction costs within limits. In spite of assistance from foreign sources in technical services and materials and the offer of services at minimum costs by local professionals, the construction costs could not be controlled in any significant manner with the result that the per square area rate almost doubled in three years.

The Sri Lankan experience in regard to evaluating projects or setting socio-economic targets in project programming has been inadequate; Sri Lanka tended to over-simplify and set improbable achievements without giving due regard to their practicability in terms of administrative and financial constraints. The target of 65% of the population to be living in urban areas by 2030 whereas in 2012 it was only 18% and with an urbanization rate the lowest in the region and the World Bank estimate was only 30% by 2050. It is important to note that better results could be achieved if realistic targets were set.

The country is also saddled by administrative and financial regulations some of which date back to early 20th century. Long, cumbersome, time-consuming procedures are stipulated for procurements and recruitments; an effort to standardize all government agencies on a single model irrespective of the type of agency has been imposed; salary structures are not realistic and unbelievably low so that the government resorts to grant additional allowances and other perks and concessions to boost the

income of professionals. However, technical and professional cadres are leaving the state service posing a big challenge to the government in continuing with the services it provided so far to the general public.

An economic model that trades off the cost of relocation as against the value of land which could be profitably sold saw more than 5000 families being relocated in multi-storey apartments at the same location they were living. Criticisms were rampant and several families sold their apartments and moved to outskirts of the city. Still, it is too early to dismiss the approach as untenable and it may be necessary to refine the process as we move onto the next phase of construction. The financing of housing for middle and high income categories fared better because commercial banks are involved, and the role of the government is only as a facilitator and repayments are stretched out over longer periods of time.

An example of facing a challenge and emerging victorious is the case of CIDA; its programmes upgraded a generation of contractors who were small time with no capacity to manage large projects into a group of contractors who were able to secure foreign contracts too. They were able to inculcate methods of professional discipline in contractors and setting them targets of higher grades according to performance. Various training programmes were conducted for professional as well as all levels of technical personnel covering all aspects in the construction field. A system of registering all categories of persons in the construction field has been introduced and new activities such as technical auditing are being introduced. The construction field is slowly becoming on par with international practices and standards.

34. Future Challenges and Issues in these Areas that Could be Addressed by a New Urban Agenda

The generally accepted “Competitive Cities Vision” has been questioned in three main areas. First, the limitations of functions and resources, under which Urban Local Authorities (ULA) operate, are not conducive to efficient urban planning or the delivery of municipal services. Second, urbanization patterns, characterized by low-density sprawl and ribbon development, are inefficient for service delivery, environmentally unsustainable, and a constraint for exploiting the economic drivers of cities. Third, cities face bottlenecks in connective and municipal infrastructure due to investment backlogs and growing demand. These are major complex challenges that the country has to face.

Challenges facing the Adequate and Affordable Urban Shelter also fall under three main heads. First, the government has to update the National Housing Policy and formulate strategies to give effect to policies especially in regard to the low-income urban housing market. Second, supply constraints affecting land management and regulation, as well as transport infrastructure bottlenecks inhibit the development of a healthy housing market. Third, the housing-finance system for both bankable and non-bankable households has weaknesses; the proposal to get the banks involved in a proactive manner needs to be formalized and implemented. Unless these factors are taken care of, the existing conditions will drive up the cost of low-income housing, forcing most low-income families to find informal solutions.

A major reorganization of the administrative and financial systems is imperative if the country is to face the challenge of the future; the system of sharing power and finance capital with local authorities needs to be embedded in a revised Constitution; getting the local authorities the responsibility to undertake a significant proportion of work by enabling them with the provision of additional cadres and capacity building programmes. This is vital to stimulate regional economy.

Controlling costs of construction and managing the use of resources for construction will be a challenge when the proposed Western Megapolis Plan is to be implemented as scheduled. It will also be a challenge to retain and attract people for the construction industry; a paradigm shift in attitudes and modernizing of working conditions may have to be introduced to make the jobs abroad in the sector respectable and acceptable and also lucrative.

Chapter Six

Housing and Basic Services

35. Slum Upgrading and Prevention

Based on the 2011 survey of Colombo carried out by the Urban Development Authority (UDA), an estimated 68,812 households live in 1,499 underserved settlements, accounting for more than half the city's population. These settlements tend to be small and scattered, and about 74% of them have less than 50 housing units. The living conditions and the status of the housing stock are generally not comparable to those in the slums of South Asian megacities. Still, available evidence indicates that substandard living conditions in underserved settlements have become a pressing concern in Colombo. A survey of the city's flood-prone underserved settlements indicates that 81% of the housing structures in the underserved areas are made of permanent building materials such as bricks, cement, and asbestos. However, the quality of construction varies and the infirmity of the ground on which they have been built (canal reservations) is perceived as prone to damage, with observed tilting of houses and cracks on the floor and walls. Lack of security of tenure is the norm in these settlements. About 90% of the surveyed communities live on land owned either by the municipal council or the Government, though 56% of them claim to have a user permit. The facilities available in the surveyed areas have improved, when compared with the situation in 2001. Water is one of the services that has most improved; of the surveyed households, 82% (44% in 2001) reported that they now have individual connections and 90% (55% in 2001) receive adequate water throughout the day. Inner access roads, a more serious concern in the surveyed communities are worse than they were in 2001. Many inner access roads in the settlements are narrow and have been further narrowed by encroaching communities who extend their houses onto the pathway. Latrines and sewerage constitute one of the thorny issues faced by the dwellers.

The sharing of toilets results in many difficulties, and privacy for women is wanting. The poor connection to the sewerage system has resulted in overflows, especially during rain and flood periods, creating health hazards. 76% of the residents surveyed have been affected by recent floods. Households have developed coping mechanisms that help them reduce the economic losses associated with flooding by raising the floor levels etc. or by building additional floors. Evidence indicates that cities and towns outside the Western Province are not spared from the challenge of underserved settlements. For example, in Matara, 17% of the housing stock is deemed to be unsanitary, due to the use of low quality material and unsafe locations. In Kandy, 18% of the population lives in 3,602 low-income housing units in 45 underserved settlements. Nuwara Eliya has more than 7,000 temporary houses constructed with non-permanent materials, equivalent to about 20% of the total housing stock. The suburban cities of Colombo, such as Dehiwala-Mount Lavinia, Kollonnawa, Kotte, Moratuwa, and Wattala, have on average 10–15% of their urban housing stock at substandard quality.

It is necessary to ensure adequate and affordable shelter for all urban dwellers, in Sri Lanka's track record in achieving the Millennium Development Goals, providing basic services, and expanding access to the underserved population. The country's urban areas rank high for liveability by South

Asian standards. Sri Lanka is the only country in South Asia that is close to achieving, or has surpassed, the Millennium Development Goals. Attendance at primary school is universal in both urban and rural areas. Sri Lanka does not have informal settlements as large as those in other Asian countries, but substandard housing is becoming a concern in both Colombo and urban areas outside the Western Province. Only 15–20% of planned low-income settlements in urban areas are financed through formal sector initiatives, with the balance funded through informal initiatives with private resources.

Table 35.1: Housing Stock District-wise 2001-2012

District	Housing Stock 1981	Housing Stock 2001	Housing Stock 2012	Increase (%) 1981-2001	Increase (%) 2001-2012
SRI LANKA	2,490,114	3,969,027	5,207,740	59.4	19.0*
Colombo	272,489	473,045	562,550	73.6	18.9
Gampaha	265,954	475,847	598,674	78.9	25.8
Kalutara	160,423	245,784	302,371	53.2	23.0
Kandy	178,381	291,454	342,911	63.4	17.7
Matale	68,208	108,566	128,090	59.2	18.0
Nuwara Eliya	122,829	164,886	178,440	34.2	8.2
Galle	146,386	229,521	271,236	56.8	18.1
Matara	121,766	174,712	205,153	43.5	17.4
Hambantota	80,496	126,362	155,716	57.0	23.2
Jaffna	159,053	NA	136,969	-	-
Mannar	18,394	NA	23,338	-	-
Vavuniya	17,865	NA	41,436	-	-
Mullativu	13,877	NA	24,684	-	-
Kilinochchi	-	NA	28,208	-	-
Batticaloa	71,137	NA	133,436	-	-
Ampara	77,978	132,371	163,243	69.8	23.3
Trincomalee	48,592	NA	95,679	-	-
Kurunegala	263,504	376,352	440,517	42.8	17.1
Puttalam	105,171	174,737	201,364	66.1	15.2
Anuradhapura	107,915	186,697	229,032	73.0	22.7
Polonnaruwa	48,183	90,999	110,326	88.9	21.2
Badulla	120,194	185,268	211,178	54.1	14.0
Monaragala	51,551	95,966	119,503	86.2	24.5
Ratnapura	158,693	242,882	284,282	53.1	17.0
Kegalle	139,993	193,578	219,404	38.3	

* only in respect of 18 districts

Source: Dept. of Census and Statistics, 1982,2002,2014; percentages added

Given past trends, addressing the backlog of substandard housing and meeting additional housing requirements in urban areas will be demanding. The government's target is to increase the supply of adequate housing to 100,000 units a year (including the improvement of existing stock) to address the backlog and ensure adequate and affordable housing for all by 2020. A substantial share of these

annual new buildings, possibly around 40–45% in the initial years and then an even larger proportion, will be in urban areas. But meeting this target will be challenging given past trends. For example, each of the two largest municipalities – Colombo and Kandy – approves 1,000 building permits a year on average, and Galle 500.

If the Western Megapolis is not complemented by similar development efforts elsewhere in other regions, the influx of people in search of better incomes will escalate the slum and shanty problem beyond control.

Table 35.2: Growth Rates of Housing Stock

	1953-1963	1963-1971	1971-1981	1981-2001
Population	30.7	20.1	17.0	26.6
Housing stock	29.4	12.4	26.9	41.0
Permanent housing stock	15.4	28.0	49.3	92.8

Source: UN Habitat, 2011

36. Improving Access to Adequate Housing

The government performs multiple functions in the low-income housing markets as a policymaker and regulatory authority, a housing promoter and financier, and a housing and infrastructure developer. In addition to urban local governments, the National Housing Development Authority, the UDA, and the Urban Settlements Development Authority are the main government agencies involved in low-income housing, but their mandates often overlap and their functions evolve as a result of changes in government funding. In the past and until the recent launch of the new low-income housing programme in Colombo, pruning of government funding led to relative neglect of the lowest income groups, as agencies shifted their focus to commercially viable income groups.

Most low-income households are not “bankable” and cannot afford access to formal housing finance. The banks classify about 80% of the nation’s earners as low income. Only 20% of all low-income earners have regular employment, potentially allowing them access to bank loans for finished housing.

Achieving this long-term vision of the government - “Affordable Housing for All by 2020” rests on preventing informal settlements from forming by developing a functioning housing market that meets the need of all segments of the population. This in turn requires the removal of constraints on the supply of land and housing finance that limit the production of formal housing by the private sector and that keep formal shelter beyond the reach of most of the urban population. The needs of the poorest people must also be met, through well targeted housing assistance programmes (for example, credit enhancement for affordable housing and home improvements).

The government in 2012/2013 had renewed its attention to low-income housing by launching a new Urban Regeneration Programme in Colombo, as part of the urban renewal initiative for Colombo.

The programme aimed to build approximately 68,000 housing units over a five-year period to re-house dwellers in underserved settlements and release valuable land for urban development. Funds for this programme are expected to be raised from sales of released lands. The success of earlier programmes implemented in the 1990's was marred by inadequate maintenance.

To succeed, the new Sustainable Township Programme needs to find solutions to the problems that plagued the earlier programmes and address institutional and policy failures in the housing sector that prompted some settlers to abandon their new apartments. The new programme departs from the previous initiative in its stronger commitment to regenerating the city and to provide all urban dwellers with adequate housing within the city limits. Yet its long-term sustainability requires an equal commitment to addressing the basic institutional and policy failures in the low-income housing market.

In the case of housing for middle and high income categories, private banks have formulated long-term loan schemes with payback periods ranging upto 25 years.

37. Ensuring Sustainable Access to Safe Drinking Water

Access to improved water and sanitation is high in urban areas: about 91% of the population there has access to "improved and sufficient water within 200 meters."

The sustainability of urban water supply systems requires better management of available water resources. The absence of integrated and systematic management of water resources at a macro level is a concern for sustaining urban water supply systems nationally. While access to water supply is high across the country, there is a need to continue to improve the efficiency, financial sustainability, and accountability of urban service providers, primarily the national Water Supply and Drainage Board (NWSDB), and to upgrade the quality of water supply, primarily in the Northern and Eastern Provinces. Most of the population in the Jaffna area relies on water from open and shallow wells on their premises. Less than half the Jaffna's population is supplied with piped water through stand posts from two wells. Because of Jaffna's unique topography and morphology, the peninsula depends primarily on groundwater resources, not only for drinking water but also for many other uses, including agriculture. The aquifer is at risk because of bacterial contamination resulting from inadequate sanitation and nutrient contamination from agricultural runoff. Excessive extraction of groundwater has also led to salinity intrusion. The NWSDB has investment projects, funded by the Asian Development Bank, to improve water supply and sanitation in Jaffna, Kilinochchi, and parts of Trincomalee District, and they are expected to yield improvements in supply infrastructure within the next three to four years.

In terms of providing water for the areas where NWS&DB systems are not planned or in parallel to the same in operation, the National Community Water Supply Department was established to cater for the balance demand under the Community Water Supply Project.

Table 37.1: Main Source of Drinking Water (2012)

Source	No. of Households	%
Protected well within premises	1,652,972	31.4
Protected well outside	772,819	14.7
Unprotected well	211,556	4.0
Tap within unit	1,110,050	21.1
Tap within premises but outside	363,043	6.9
Tap outside premises	181,235	3.4
Rural water supply	482,937	9.1
Tube well	177,432	3.4
Bowser	18,931	0.4
River/tank/streams/spring	239,952	4.6
Rain water	4,022	0.1
Bottled water	9,984	0.2
Other	39,349	0.7
TOTAL	5,264,282	100

Source: Dept. of Census and Statistics, 2014; percentages added

The use of purified water for landscaping, car-washing and toilets in major cities has been a contentious issue. There is no compulsion on the part of users to collect rain water for uses other than for drinking and cooking. The government heavily subsidises the cost of purified water for domestic users and it is seen that the system may not be sustainable.

Table 37.2: Usage of Water 2008-2012

Year	Domestic			Non-domestic			Billed quantity as a % of total		Bill value as a % of total	
	No. of connections ('000)	Consumption (MCM)	Bill value (Rs.mil)	No. of connections ('000)	Consumption (MCM)	Bill value (Rs.mil)	Domestic %	Non-domestic %	Domestic %	Non-domestic %
2008	1093	207.01	3.84	92	93.93	4.03	68.8	31.2	49	51
2009	1166	214.98	5.72	96	94.65	5.39	69.4	30.6	51	49
2010	1247	226.11	6.47	102	96.72	5.92	70.0	30.0	52	48
2011	1336	241.92	7.03	109	102.58	6.30	70.2	29.8	53	47
2012	1466	266.45	8.35	119	107.32	6.74	71.3	28.7	55	45

Source: National Water Supply and Drainage Board, 2013

In certain areas in the North Central Province where water has been contaminated by the prolonged use of chemical fertiliser resulting in unusual proportion of people contracting kidney-related diseases, access to safe drinking water has reached critical levels. A sustainable plan is being devised to overcome this issue.

38. Ensuring Sustainable Access to Basic Sanitation and Drainage

Sri Lanka's access to improved sanitation reached 91% in 2008, higher than the average for South Asian countries (36%).

Sewerage facilities need to be expanded to cope with rising population densities. Access to sanitation is highest in Colombo and Gampaha (96%) and the lowest in Batticaloa (57%). But though access is high, the system cannot cope with cities' growth. The Colombo Municipal Council is the only local authority with a sewerage network; its access rate is estimated at 80%, and part of the system requires urgent repair. The Asian Development Bank-funded Colombo Sewerage Project to rehabilitate the system is now under way. This investment, however, only covers Colombo. In most other areas, the current system of septic-tank sewerage management is becoming less and less sustainable due to an inadequacy of regulation of septic systems, contamination of groundwater, and improper sludge disposal. Inadequate sewerage services also encourage uncontrolled discharge of sewage into waterways and marshes, and the discharge of pollutants by factories is poorly controlled. In Colombo, domestic wastewater in a part of the city is discharged to the ocean after only primary treatment. While most urban centres outside the Western Province have not yet reached the minimum density required to make a sewerage network economically viable, investments in sewerage infrastructure to cope with increasing densities will be required in a number of cities over the coming years, in particular tourist centres. Accordingly sewerage systems are being developed in Kandy, Passikuda, and Hikkaduwa at present.

The rest of the country copes up with individual septic tanks. While in many areas these are adequate in some areas in the wet zone these become unusable during rainy season.

As far as drainage is concerned, cities are becoming very sensitive to heavy rains; flash floods are frequent in Colombo and other cities. The decrease of exposed ground due to unsound landscape designs promoting totally paved areas preventing seepage, blocking of drains by polythene bags and other waste, building on canal reservations, filling of low-lying areas and agricultural lands those acted as retention areas, and local depressed areas due to faulty land preparation activities are the main reasons for these flash floods. Another issue is the clearing of forests in the up country areas those acted as containers of water; in the absence of forests the water gushes down the rivers and floods the low land plains. It is asserted that more than 1 million people are living in flood-prone areas and 25% of them are occupying houses of a temporary nature. The increasing intensity and frequency of rainfall ascribed to climate change has caused cities to experience flood-situations sometimes lasting for a few days.

The provision in the National Physical Plan to conserve the forests and reforest the lost sections would be essential if the natural system that ensured a perennial supply of water in the rivers and prevented floods in the lowlands is to be restored.

Table 38.1: Availability of Sanitation 2012

Principal type of Cooking	No. of households	Type of housing unit			Unclassified (%)
		Permanent (%)	Semi-permanent (%)	Improved (%)	
Sri Lanka	5,264,282 (100%)	4,285,971 (81.4%)	936,176 (17.8%)	40,719 (0.8%)	1,416 (0.02%)
Exclusive	4,565,611 (86.7%)	3,896,358 (85.3%)	654,289 (14.3%)	14,034 (0.4%)	930 (0.02%)
Shared	574,303 (10.9%)	349,017 (60.8%)	210,729 (36.7%)	14,145 (2.5%)	412 (0.07%)
Common	36,088 (0.7%)	19,413 (53.8%)	15,246 (42.2%)	1,410 (3.9%)	19 (0.05%)
Not using a toilet	88,280 (1.7%)	21,183 (24.0%)	55,912 (63.3%)	11,130 (12.6%)	55 (0.06%)

Source: Dept. of Census and Statistics, 2014; percentages added

39. Improving Access to Clean Domestic Energy

The domestic energy use is basically used for lighting and cooking; mechanical ventilation is primarily electric fans and to a limited extent in up country areas heaters; rarely exhaust fans or air conditioning. The main energy sources used are electricity from the main grid, liquid petroleum gas, kerosene oil, and mostly dendro; to a very limited extent solar panels and generators. Sri Lankan domestic energy use has always been very low owing to the favourable climatic conditions. Domestic energy use is only 14% of total energy consumption of the country.

Main energy sources of electricity production in the country are coal, fossil fuels, hydro-electricity, wind and solar.

A debate that has taken place during the last two decades was regarding the merits and demerits of coal power, fossil fuel power, wind power and nuclear power. Whereas nuclear has almost been given up, the latest power generating stations constructed have been based on coal power. These stations are invariably located in coastal towns to minimise its effects for people. Solar power is used at domestic scale and special concessions are available for those using solar power and adding the excess to the national grid.

Table 39.1: Domestic Use of Cooking Fuel (2012)

Principal type of Cooking	No. of households	Type of housing unit			Unclassified (%)
		Permanent (%)	Semi-permanent (%)	Improved (%)	
Sri Lanka	5,264,282 (100%)	4,285,971 (81.4%)	936,176 (17.8%)	40,719 (0.8%)	1,416 (0.03%)
Firewood	4,124,667 (78.4%)	3,203,890 (77.7%)	881,303 (21.4%)	38,541 (0.9%)	933 (0.02%)
Kerosene	129,896 (2.5%)	108,368 (83.4%)	20,147 (15.5%)	1,318 (1.0%)	63 (0.05%)
Gas	975,262 (18.5%)	943,960 (96.8%)	30,386 (3.1%)	550 (0.06%)	366 (0.04%)
Electricity	9,770 (0.2%)	8,895 (91.0%)	852 (8.8%)	20 (0.2%)	3 (0.03%)
Saw dust/Paddy husk	7,606 (0.1%)	6,729 (88.5%)	789 (10.4%)	79 (1.0%)	9 (0.1%)
Other	17,081 (0.3%)	14,129 (82.7%)	2,699 (15.8%)	211 (1.3%)	42 (0.2%)

Source: Dept. of Census and Statistics, 2014; percentages added

Table 39.2: Domestically Used Lighting Types (2012)

Principal type of lighting	No. of households	Type of housing unit			Unclassified (%)
		Permanent (%)	Semi-permanent (%)	Improved (%)	
Sri Lanka	5,264,282 (100%)	4,285,971 (81.4%)	936,176 (17.8%)	40,719 (0.8%)	1,416 (0.03%)
Electricity- National Electricity Network	4,577,662 (87.0%)	4,012,986 (87.7%)	556,899 (12.1%)	6,829 (0.2%)	948 (0.02%)
Electricity- Rural Hydro-Electricity Project	8,549 (0.2%)	5,630 (65.9%)	2,904 (34.0%)	15 (0.1%)	-
Kerosene	640,265 (12.2%)	243,469 (38.0%)	363,137 (56.7%)	33,234 (5.2%)	425 (0.07%)
Solar Power	33,597 (0.6%)	21,478 (63.9%)	11,616 (34.5%)	472 (1.4%)	31 (0.1%)
Bio Gas	133 (0.003%)	86 (64.7%)	44 (33.1%)	2 (1.4%)	1 (0.8%)
Other	4,076 (0.08%)	2,322 (57.0%)	1,576 (38.6%)	167 (4.1%)	11 (0.3%)

Source: Dept. of Census and Statistics, 2014; percentages added

Table 39.3: Consumption (thousand toe)

	2010	2011	2012	2013	2014
Biomass	4,929.78	4,919.77	4,847.14	4,797.02	4,884.10
Petroleum	2,969.54	3,062.44	3,065.15	3,146.01	3,243.86
Coal	59.93	50.25	62.24	52.79	61.59
Electricity	791.93	859.13	895.19	907.68	945.74
Total	8,751.18	8,891.59	8,869.72	8,903.50	9,135.29

Source: Sri Lanka Sustainable Energy Authority

Table 39.4: Consumption by Sector (thousand toe)

	2010	2011	2012	2013	2014
Industry	2,070.09	2,171.86	2,267.81	2,261.29	2,363.42
Transport	2,368.15	2,434.80	2,458.56	2,566.70	2,686.25
Household, Commercial & others	4,312.94	4,284.91	4,143.37	4,075.53	4,085

Source: Sri Lanka Sustainable Energy Authority

Ceylinco building constructed in 1952 with its 12 stories was the tallest building in Sri Lanka; but from 1970s onwards when multi-storey buildings began to appear in cities, architects were experimenting with passive designs which tried to capture the natural forces to ventilate and cool the internal spaces of buildings. However with increasing prosperity, and the commissioning of major hydro-power plants making electricity available in many parts of the country, air conditioning became a way of expressing the stature in the commercial world and clients began to insist on their buildings getting central air conditioning systems. The trend is continuing into the domestic domain and the luxury apartment blocks being constructed at present have the air conditioning option available for their clients.

Access to electricity is available almost everywhere in Sri Lanka; the coverage is 96% with 100% coverage expected in a few years.

40. Improving Access to Sustainable Means of Transport

The public transport services are limited to train, bus, motor car taxi and three-wheeler taxi; the bus claiming a hugely disproportionate volume of traffic. The early system of train travel to Colombo still persists from some locations but other than that the rest of travel is by bus. Groups of workers arranging a van for office transport for a fixed charge per month is also found to be trending; this is largely common in the case of school transport. Comfort (in most cases air conditioned), assurance of a seat and safety of a privately-arranged van are preferred to over-crowding, discomfort, and dangers inherent in public transport. The vast majority using private transport use the motor bicycle; others use car, and rarely bicycle.

Urban living in cities has become to be expensive over the years; Colombo is fast becoming the exclusive city of the rich and the low-income groups; the latter not minding living in slums as long as they are close to their place of work. Middle income groups are leaving the city to the peri-urban areas. The problem has assumed a critical stage where Colombo city day-time population on weekdays becomes thrice that of its night-time population roughly a million people coming into the city. The public transport services are invariably over-crowded forcing piddle-income groups to somehow aspire to acquire a motor-bike in the first instance and then move onto a motor car. The result is that the average occupancy of private cars entering the city is just above 01. The travel speeds within the city has become as slow as 8 km/hr and travelling in a bus or a car hardly makes a difference in terms of time.

The situation has moulded the social norm in such a way that ownership of a vehicle has become an indication of success. This works in a vicious cycle and sales of motor cars have been on the rise with to government trying with little success to curtail the trend by imposing high taxes.

However, the issue has become too complex to be solved by increased taxes; the Western Megapolis plan is seeking solutions and those under consideration are RBT systems and electrification of railways; restructuring the bus movement routes is also being studied.

41. Challenges Experienced and Lessons Leant

Sri Lanka's settlements upgrading is a programme of mixed-success; while the service situation has drastically improved (water, electricity, and sanitation), access routes have been reduced. Access to housing finance has improved in respect of upper and middle income groups but no significant progress has been recorded in respect of low-income groups other than direct government funding which was ever diminishing over the years. The recent efforts to relocate the slum-dwellers in multi-storey apartments have been an impressive experience and its success is yet to be seen.

Controlling of unauthorized constructions has been a major reason for blocking of canals blocking drainage thus causing flooding in urban areas. Similarly enforcing discipline in waste disposal is an issue. Enacting regulations regarding sound design practice whereby drainage can be facilitated was another aspect not given enough attention to. The absence of a programme implemented with sustained vigour is a lapse from which many lessons were learnt.

The provision of sewerage has been identified as a challenge; however it was never considered giving due regard to its significance. The present system in Colombo was installed when the city had only a fraction of the population it is having now. A fundamental lesson learnt is that sewerage is part of the basic infrastructure needed for a city to function in a competitive manner and therefore the capital expenditure on a system is to be considered as an investment where economic viability does not count.

The expansion of areas supplied with electricity is a challenge almost totally won.

The challenge of providing improved access to means of transport is a continuing battle; in terms of vehicle ownership the numbers show definite progress; however the conditions of transport have deteriorated. It is apparent that this was due to the lack of an integrated approach to transport planning as a part of urban planning. A combination of zoning and decentralization coupled with modern systems of mass transit ought to have been adopted.

42. Future Challenges and Issues in these Areas that Could be Addressed by a New Urban Agenda

The principal challenge in the future will be the management of urban growth which the Government is keen in addressing in a systematic manner as evidenced by the plans to set up the Megapolis Development Authority. At the same time, underserved settlements also pose a challenge which the country has to solve; a society cannot enter into a high middle income category with a significant portion living in such settlements. Models of development adopted elsewhere in the world may not be relevant or successful in our context. City structure and urban designs for high density living ought to be formulated and implemented.

The discontinuation of water subsidy and prevention of wastage of purified water for activities which do not need such quality water will be another challenge the country has to resolve. The separation of water may require a sizable investment that will pay back over time; it is a project requiring urgent attention. In addition attention needs to be focussed on the significant percentage of water consumption unaccounted for.

The new cities and the existing cities earmarked for expansion need proper sewerage schemes. The challenge will be to incorporate such schemes in the programme and financing them to be implemented in the first phase of the project. The proposed new Port City belt will make a considerable demand for water supply and sewage disposal.

Better regulation and monitoring of new constructions is required if further deterioration of the drainage systems is to be avoided; at the same time the encroachments into canal reservations and drains need to be removed. It is also imperative that the drainage issue be considered in respect of effects of climate change; the possibility of more frequent and intense rains must be a significant factor in a future plan.

The social attitudes in the use of transport and especially the ownership of private motor cars need to change; as long as travel to work in a single-occupant car is looked upon as an ideal situation, and as long as use of public transport is looked down on as the hallmark of a loser, the country is never going to solve the traffic problem. An integrated programme of improving public transport, reducing the distance to work and changing social attitudes needs to be formulate and implemented. At the same time a close tab on development trends in new transport systems needs to be kept; and adaptation to a fossil-fuel-free world has also to be worked out in advance.

The possibility of an influx of people to the Western Megapolis is envisaged by its provision for 9 million people; how these people are going to be accommodated while improving the conditions of

the 300,000 already in Colombo City underserved settlements will be a challenge. The financing of housing requirement by conventional means may not be adequate or even forthcoming. An extensive programme of social and economic development of these families may need to be floated if they are to be credit-worthy; previous attempts at enabling low-income families such as Janasaviya and Samurdhi programmes need to be continued with sustained political patronage. The kind of change and activity required for this enormous task needs exceptional commitment.

Chapter Seven Indicators

I. Percentage of People Living in Slums

In the City of Colombo, there were 146,442 and 124,101 persons residing in slums and shanties respectively in 1985. They constituted 24.5% and 20.8%, i.e.45.3% of Colombo's population. In 2001, 77,612 families were living in 1,614 low-income settlements in the city. These are underserved settlements.

Table I.1: Percentage of Shanties & Row-Houses 2012

Type	Units	Population (est.)*
Total Housing	5,207,740 (100%)	20,359,439 (100%)
Row houses/line rooms	185,131 (3.6%)	833,089 (4.1%)
Huts/Shanties	77,365 (1.5%)	348,142 (1.7%)

Source: Dept. of Census and Statistics

* Estimated at 4.5 persons/household

II. Percentage of Urban Population with Access to Adequate Housing

Table II.1: Percentage of Adequate Urban Housing Units 2012

Type	Units	Population (est.)*
Total Urban	907,370 (100%)	3,704,470 (18.2%)
Permanent (Total adequate housing stock)	836,533 (92.2%)	3,414,038 (92.2%)
Semi-permanent	66,726 (7.4%)	273,577 (7.4%)
Improvised	3,487 (0.4%)	14,297 (0.4%)
Unclassified	624 (0.07%)	2,558 (0.07%)
Total inadequate housing stock	70,837 (7.8%)	290,432 (7.8%)

Source: Dept. of Census and Statistics

* Estimated at 4.1 persons/housing unit (National urban average)

III. Percentage of People Residing in Urban Areas with Access to Safe Drinking Water

Table III.1: Percentage of Urban Population with Safe Drinking Water- 2012

Type	Units	%	Population (est.)*
Total Urban households	913,178 (100%)	-	3,704,470 (18.2%)
Protected well within premises	164,208	18.0	666,684
Protected well outside premises	21,624	2.4	87,793
Unprotected well	2,895	0.3	11,754
Tap within unit (main line)	542,069	59.4	2,200,800
Tap within premises- outside unit (main line)	75,150	8.2	305,109
Tap outside premises (main line)	42,898	4.7	174,167
Rural water projects	18,450	2.0	74,907
Tube well	30,220	3.3	122,694
Bowser	3,156	0.4	12,813
Rive/tank/streams/spring, etc.	2,208	0.2	8,964
Rain water	73	0.01	296
Bottled water	5,105	0.6	20,726
Other	5,122	0.6	20,795
Urban population with safe drinking water	902,880	98.9	3,665,693

Source: Dept. of Census and Statistics

* Estimated at 4.06 persons/household (National urban average)

IV. Percentage of People Residing in Urban Areas with Access to Adequate Sanitation

Table IV.1: Percentage of Urban Population with Adequate Toilet Facilities- 2012

Type	Units	%	Population (est.)*
Total Urban households	913,178 (100%)	-	3,704,470 (18.2%)
Exclusive	805,191	88.2	3,266,401
Shared	80,775	8.8	327,678
Common	26,266	2.9	106,550
Not using a toilet	947	0.1	3,841
Urban population with adequate sanitation	885,966	97.0	3,594,079

Source: Dept. of Census and Statistics

* Estimated at 4.06 persons/household (National urban average)

V. Percentage of People Residing in Urban Areas with Access to Regular Waste Collection

Table V.1: Percentage of Urban Population with Facilities for Solid Waste Disposal- 2012

Type	Units	%	Population (est.)*
Total Urban households	913,178 (100%)	-	3,704,470 (18.2%)
Collected by Local Authorities	681,959	74.7	2,766,489
Occupants burn	146,674	16.1	595,009
Occupants bury	51,547	5.6	209,109
Occupants composting solid waste	25,820	2.8	104,744
Occupants disposing solid waste onto road	2,346	0.3	9,517
Other	4,832	0.5	19,602
Urban population with access to regular waste collection	906,000	99.2	3,675,351

Source: Dept. of Census and Statistics

* Estimated at 4.06 persons/household (National urban average)

VI. Percentage of People Residing in Urban Areas with Access to Clean Domestic Energy

Table VI.1: Percentage of Urban Population According to Type of Energy Use- 2012

Type	Units	%	Population (est.)*
Total Urban households	913,178 (100%)	-	3,704,470 (18.2%)
Electricity- National Electricity Network	885,023	96.9	3,590,254
Electricity-Rural Hydro Electricity Project	280	0.03	1,136
Kerosene	27,334	3.0	110,885
Solar power	188	0.02	763
Bio Gas	5	0.0	20
Other	348	0.04	1,412
Urban population with access to clean domestic energy	885,491	96.9	3,592,153

Source: Dept. of Census and Statistics

* Estimated at 4.06 persons/household (National urban average)

VII. Percentage of People Residing in Urban Areas with Access to Public Transport

Table VII.1: Percentage of Population Transported by Buses- 2010-2014

Year	2010	2011	2012	2013	2014
Bus Fleet – No. of buses in operation	5,407	5,333	5,191	5,081	5,222
No. of km. operated daily	1,013,413	1,027,450	1,059,423	1,127,128	1,017,086
No. of buses operated in a day	4,424	4,350	4,310	4,372	4,596
Timetable requirement	7,096	7,108	7,165	7,174	7,226
No. of passenger km.	11,814,925,979	11,906,722,232	11,909,164,527	12,201,484,395	12,717,358,060
Passengers transported	47,982,500	46,625,730	49,684,368	44,651,910	40,743,700

Source: Ministry of Transport and Civil Aviation, 2015

Table VII.2: Percentage of Population Transported by Trains- 2010-2013

Year	2010	2011	2012	2013
Total Length of the trace (km)	1137.95	1148.11	1148.11	1254.23
No. of Main Railway Stations	154	155	154	160
No. of Sub Railway Stations	147	147	147	148
No. of Passengers Carried (in millions)	101.45	96.11	106.05	118.71

Source: Ministry of Transport and Civil Aviation, 2015

Table VII.3: Public Passenger Transport Modal Shares (2013)

Mode	Fleet	No of Passengers Travelled	Percentage
Buses	25643	3675,200,000	96.8%
Sri Lanka Transport Board	5,222	895,300,000	23.6%
Private	20,421	2779,900,000	73.2%
Railway	246	118,710,000	3.2%

Source: Ministry of Transport

VIII. Percentage of Policies and Legislation on Urban Issues in Whose Formulation Local and Regional Governments Participated from 1996 to the Present

According to the prevailing law, all legislations are scrutinized by the Supreme Court of Sri Lanka and their determination as to whether any legislation needs the approval of Provincial Councils is sought. During the period under review, one such legislation related to urban issues presented in the Parliament, viz. Town and Country Planning (Amendment) in 2011 was not approved by the Eastern and North Central Provincial Councils and the Bill was subsequently withdrawn.

Relevant legislations approved during this period are as follows:

Land Development (Amendment) Act No.20 of 1996
Soil Conservation Act No.24 of 1996
National Aquaculture Development Authority of Sri Lanka (Amendment) Act No.53 of 1998
Apartment Ownership (Special Provisions) Act No.4 of 1999
Sri Lanka Institute of Local Governance Act No.31 of 1999
National Housing Development Authority (Amendment) Act No.30 of 1999 and No.32 of 2003
Water Resources Board (Amendment) Act No.42 of 1999
Town and Country Planning (Amendment) Act No.49 of 2000
Housing Development Finance Corporation of Sri Lanka (Amendment) Act No.15 of 2003
Common Amenities Board (Amendment) Act No.24 of 2003
Disaster Management Act No.13 of 2005
Tsunami Act No.16 of 2005
Tourism Act No.38 of 2005
Sri Lanka Land Reclamation and Development Corporation (Amendment) Act No.35 of 2006
Resettlement Authority Act No.10 of 2007
Urban Development Authority (Amendment) Act No.36 of 2007
Local Authorities (Special Provisions) No.55 of Act 2007
Marine Pollution Prevention Act No.35 of 2008
Forests (Amendment) Act No.65 of 2009
Board of Investment of Sri Lanka (Amendment) Act No.3 of 2012

Pradeshiya Sabhas Act No.36 of 2014
Land (Restrictions on Alienation) Act No.38 of 2014

Relevant policies approved during this period are as follows:

National Forestry Policy (1995)
National Air Quality Management Policy (2000)
National Involuntary Resettlement Policy (2000)
National Environmental Policy (2003)
National Watershed Management Policy (2004)
National Policy on Wetlands (2005)
National Policy on Solid Waste Management (2005)
National Physical Planning Policy (2007)
Land Transport Policy (2010)
National Policy on Disaster Management (2013)
National Youth Policy (2014)
National Housing Policy (2014)

IX. Percentage Share of Both Income and Expenditure Allocated to Local and Regional Governments from the National Budget

Table IX.1: Funds Transferred from Central Government to Provincial Councils (Rs.Million)

Year	Recurrent (block grant)	Capital		Revenue Transfers	Total	Total National Budget	% allocated to Provincial Councils
		Domestic	Foreign				
2011	94,764	16,273	11,344	25,884	148,265	1,961,053	7.5
2012	92,059	11,197	14,367	27,624	145,247	2,190,000	6.6

Source: Department of National Budget

X. Percentage Share of Local Authorities' Expenditure Financed from Local Revenue

Table X.1: Total Revenues of Local Authorities (2003)

Local Authorities	Own Recurrent Revenue		Recurrent Cost (Block) Grant		Capital Grants & Assets		Total Revenue	
	Avg/LA (Rs.Ml)	% of Total	Avg/LA (Rs.Ml)	% of Total	Avg/LA (Rs.Ml)	% of Total	Avg/LA (Rs.Ml)	% of Total
MC (18)	167.7	50.5	96.0	28.9	68.6	20.6	332.3	100
UC (36)	14.3	37.8	10.6	27.8	13.1	34.4	38.0	100
PS (256)	7.8	39.1	5.6	28.1	6.6	32.8	20.0	100
Total	17.9	44.1	11.5	28.4	10.9	27.1	40.3	100

Totals for 18 Municipal Councils, 36 Urban Councils, 256 Pradeshiya Sabhas

Source: Department of Census and Statistics, 2004

XI. Percentage of City, Regional and National Authorities that have Implemented Urban Policies Supportive of Local Economic Development and Creation of Decent Jobs and Livelihoods

Preparation of integrated development plans incorporating economic, social, physical and environmental aspects of development have been vested with the local authorities. However, in view of the dearth of expertise within local authority cadres, and the inability to engage professionals to prepare relevant plans, the local authorities depend on the Urban Development Authority, the Mahaweli Development Authority and the National Physical Planning Department to prepare policies and plans for them.

Table XI.1: Number of Local Authorities

Province	Municipal Councils	Urban Councils	Pradeshiya Sabha	Total
Central	4	6	33	43
Eastern	3	5	37	45
North Central	1	0	25	26
North Western	1	3	29	33
Northern	1	5	28	34
Sabaragamuwa	1	3	25	29
Southern	3	4	42	49
Uva	2	1	25	28
Western	7	14	27	48
Total	23	41	271	335

Source: Wikipedia

Table XI.2: Number of Plans Prepared for Local Authorities

Local Authorities	UDA	NPPD	Total	No. of Las	%
Municipal Councils	15	-	15	23	65%
Urban Councils	11	-	11	41	27%
Pradeshiya Sabhas	15	70	85	271	31%
Total	41	70	111	335	34%

Sources: UDA, NPPD

XII. Percentage of City and Regional Authorities that have Adopted or Implemented Urban Safety and Security Policies or Strategies

The three major planning agencies prepare integrated plans incorporating urban safety and security policies; hence all the plans prepared for local authorities contain these measures as an integral part of the plans.

Table XII.1: Number of Plans Prepared Incorporating Urban Safety and Security Policies

Local Authorities	UDA	NPPD	Total	No. of LAs	%
Municipal Councils	15	-	15	23	65%
Urban Councils	11	-	11	41	27%
Pradeshiya Sabhas	15	70	85	271	31%
Total	41	70	111	335	34%

Sources: UDA, NPPD

XIII. Percentage of City and Regional Authorities that have Implemented Plans and Designs for Sustainable and Resilient Cities that are Inclusive and Respond to Urban Population Growth Adequately

UN Human Settlements Development Programme organized the preparation of disaster resilience plans for four local authorities, viz. Batticaloa and Kalmunai in the Eastern Province and Ratnapura and Balangoda in the Sabaragamuwa Province. They were selected based on their potential for urban development, susceptibility to multiple disasters and unavailability of landuse plans. This is 1.2% of the total local authorities in the country. However in the context of 172 local authority areas located mainly in the central and coastal areas of the country which are considered as highly vulnerable to disasters, the four plans comprise 2.3% of affected local authorities.

XIV. Share of National Gross Domestic Product (GDP) that is Produced in Urban Areas

Table XIV.1: Sectoral Share of GDP 2008-2013

Sector		2008	2009	2010	2011	2012	2013
Rural	Agriculture	13.4%	12.7%	12.8%	12.1%	11.0%	10.8%
Urban	Industries	29.4%	29.7%	29.4%	29.9%	31.5%	32.4%
	Services	57.2%	57.6%	57.8%	58.0%	57.5%	56.8%
Total urban		86.6%	87.3%	87.2%	87.9%	89.0%	89.2%
GDP (Rs. Billion)		4,411	4,835	5,604	6,543	7,579	8,674

Source: Central Bank, 2014; Percentages added

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