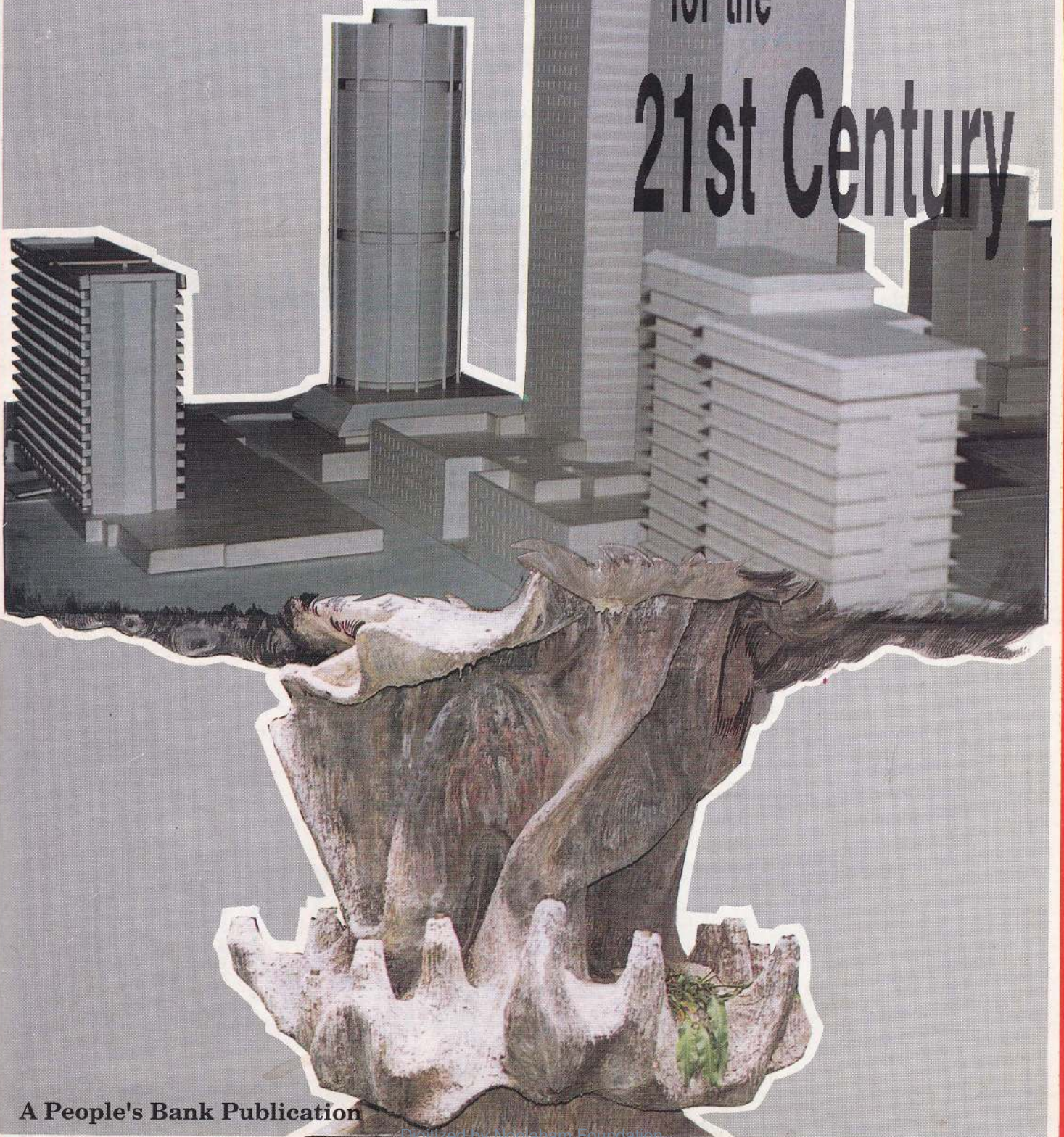


# ECONOMIC REVIEW

March 1996

# Cities for the 21st Century



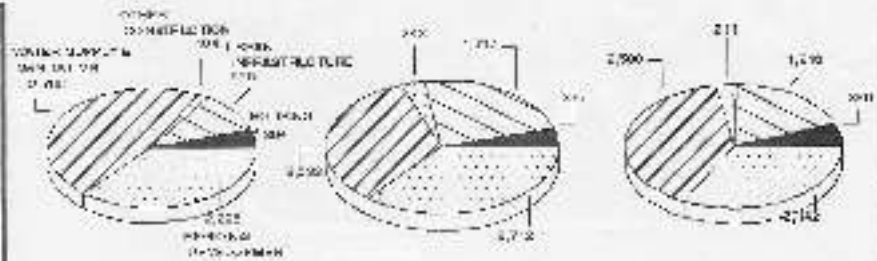
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# TALK OF THE TOWNS

## PUBLIC SECTOR INVESTMENT ON HUMAN SETTLEMENTS Actual Expenditure (Rs. Million)

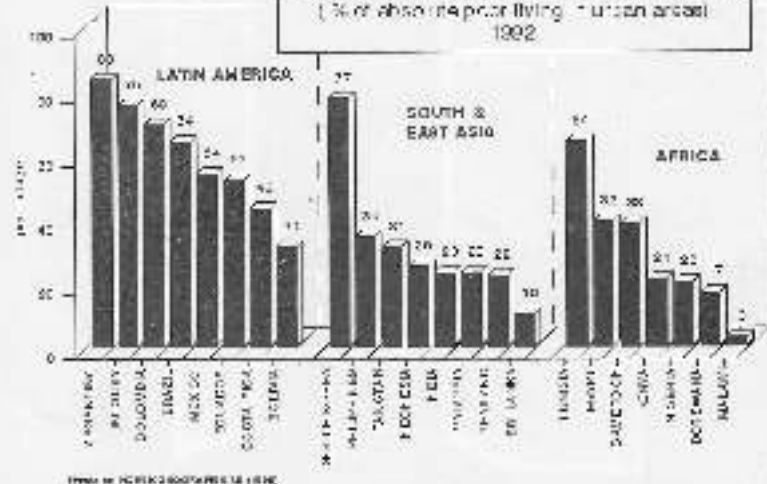
1982    1993    1994



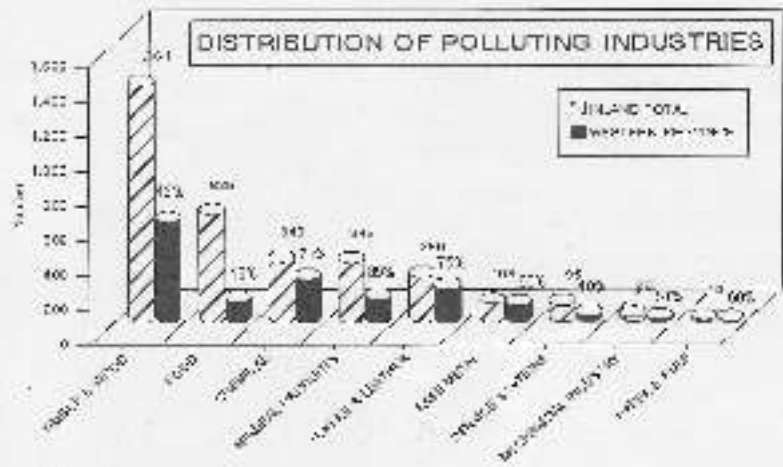
### THE WORLD'S CROWDED CITIES

RANK	POPULATION (in millions)	1985	2000	CITY
2	1	17.3	25.8	MEXICO CITY
3	2	15.9	24.0	SAO PAULO
1	3	18.8	20.2	TOKYO
6	5	11.0	16.5	CALCUTTA
11	6	10.1	16.0	BOMBAY
4	7	15.6	15.8	NEW YORK
10	8	10.3	13.8	SEOUL
20	9	7.5	13.6	TEHRAN
8	10	10.4	13.3	RIO DE JANEIRO
5	11	11.8	13.3	SHANGHAI
17	12	7.9	13.2	JAKARTA
21	13	7.4	13.2	DELHI
7	14	10.9	13.2	BUENOS AIRES
23	15	6.7	12.0	KARACHI
31	16	4.9	11.2	DAKKA
24	17	7.0	11.1	MANILA
19	18	7.7	11.1	CAIRO
13	19	10.0	11.0	LOS ANGELES
26	20	6.1	10.7	BANGKOK
9	21	10.4	10.5	LONDON
15	22	9.4	10.5	OSAKA
11	23	9.1	10.4	BEIJING
15	24	9.0	10.4	MOSCOW
18	25	7.8	9.1	TIJANJIN
27	26	5.7	9.1	LIMA
16	27	8.7	8.7	PARIS
46	28	3.6	8.3	LAGOS
22	29	7.2	8.1	SHEN
28	30	5.2	8.1	MADRAS
40	31	4.0	8.0	BANGALORE
34	32	4.4	7.4	BAGHDAD
31	33	6.8	7.0	CHICAGO
35	34	4.5	6.5	BOGOJA
36	35	5.1	6.4	HONG KONG
44	36	3.7	6.2	LAGORB
37	37	4.1	6.2	PUSAN
32	38	5.1	5.9	LJNINGRAO
32	39	4.7	5.4	MADRID
35	40	4.2	5.3	SANTIAGO
37	41	4.1	5.2	SHINYANG
43	42	3.7	5.0	CARACAS
39	43	4.2	4.4	PHILADELPHIA
39	44	4.1	4.3	NAPLES
41	45	3.8	4.2	SYDNEY
42	46	3.8	4.0	DIPKOROL
45	47	3.7	3.7	ROME

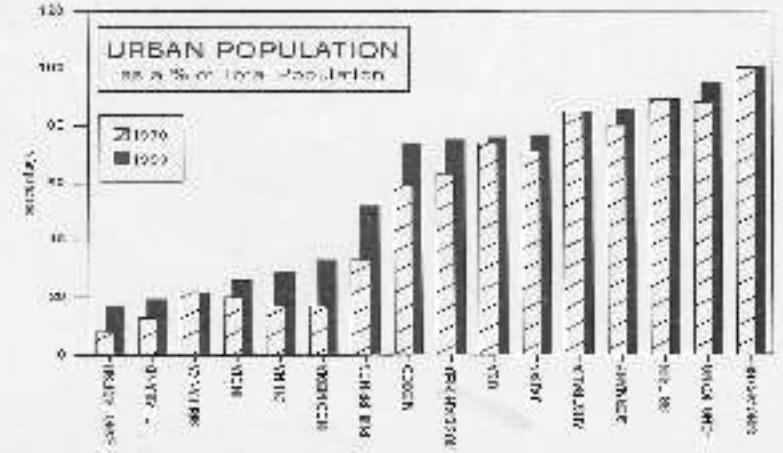
### ABSOLUTE POOR IN URBAN AREAS (% of absolute poor living in urban areas) 1992



### DISTRIBUTION OF POLLUTING INDUSTRIES



### URBAN POPULATION as a % of total population



**CONTENTS**

**FEATURES/COLUMNS**

Broader Measures of Economic Development 34

**SPECIAL REPORT**

**Cities for the 21<sup>st</sup> century**

Urban Development and Economic Growth 3

Urban Development Sector Project 7

Urban Planning and Development Control :  
The Sri Lankan Experience 8

*Face to Face* 13

Planning for Urban Development in Sri Lanka 14

Towards Urbanisation in 2015 16

Cities and the New Global Economy 17

Impact of Urbanisation on selected  
Urban Megacities 18

Urbanisation and Urban Growth in Sri Lanka 20

Urbanisation Trend in the Greater Colombo Area  
*Using Air Photos* 26

Alleviating the Conditions of the Urban Poor 29

*Next Issue:*

**Forestry**

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# Cities for the 21st Century

**T**he statistics are mindboggling. By the year 2025, half Asia's population will live in megacities, the inhabitants of Asia's urban areas growing at an average rate of 140,000 persons per day. Of the estimated 27 global megacities envisioned by 2015, 17 will be in Asia, a sharp rise from the present figure of 9. This will mean increased competition for already meager resources coupled with dwindling investment. The situation is no less grave in the rest of the world, where the world's cities are growing by as much as one million people each week.

These facts and figures were disclosed at an Asian Development Bank seminar held very recently in Manila.

The many problems which beset the massive Asian urban agglomerations give rise to the doubt of their ability to sustain the fast-multiplying urban populations of the future.

At present, half the world's urban population lives in unplanned squatter settlements and substandard housing, within environments which breed crime and disease. Acute shortages of water and energy supplies, inadequate facilities for waste disposal, accumulated congestion and noise pollution are everyday facts of life.

Urban living conditions define the quality of life of more than half the world. Despite their environment of squalor, cities have lost none of their attraction for the rural populace. These cities still offer better chances for employment and education, provide a better physical infrastructure and greater access to health facilities as well as a more diversified life style. It is therefore an illusion to believe that the growth of cities could be curbed by concentrating development efforts on the countryside, a point of view held by one school of urban planners. It is also a fact that today's severe environmental problems can only be solved if people live in highly concentrated settlements rather than in hamlets scattered throughout the countryside. Environment-friendly mass transport for instance is only possible in the cities, fossil fuel consumption which adds to the

pollution of the atmosphere will be lower when people live close to their places of work. The supply of food, water, electricity and social amenities is cheaper and fewer resources are used up when distances are short. Land used for housing, transport and industry is less when buildings grow in height rather than in space. Even refuse disposal and wastewater management is easier to organize in a big city than in the countryside.

There is a lesson to be learnt from the cities of Europe. Although about three quarters of the people live in urban areas, there are only a handful of megacities like London and Paris. Germany for instance, with its population of some 80 million, has only 3.4 million inhabitants in its capital city, Berlin, and three other cities have just over one million people. In other words, although highly urbanised, their population is fairly evenly distributed over the whole territory. This is effective in providing the benefits of city life without incurring the risks of unmanageable megacities that characterise urban development in the Third World.

Cities have always been in the vanguard of development. The megacities of today, however, have come a long way from the days of yore when only a few cities dominated the global economy, viz. Venice, Constantinople in the Renaissance period, London, New York in the Industrial Age. The world economy has now changed to a polycentric structure composed of regional clusters or networks of cities dispersed throughout the world. This polycentricity is viable in the modern context since many contemporary governments are decentralising their functions. New ideas, technologies, innovative strategies are required if cities are to keep abreast of this rapid economic change. It is therefore vital that they chart their own development. Metropolises more competitive, more open to investment and innovation will carry the day, since their adaptability would equip them to develop economic strategies that will focus on their strengths. They will then evolve

into entities with individualistic identities far removed from their national framework.

Change will also be inevitable if pollution of the environment continues, but under conditions of crisis and at a much higher cost. The scene is set for battle, Asia will be the battlefield.

The importance of governments for creating framework conditions cannot be overemphasised. Good governance spawned the perennial city cultures of ancient Mesopotamia, Egypt, Greece and Rome, which even today are looked upon as blue-prints of effective urban planning. However, many governments in the developing world are of the opinion that environmental protection and economic growth are a contradiction in terms.

The pursuit of sustainable development without long-term environmental damage is vital, but requires constant adjustment in response to the interaction between man and nature. Solutions however can never be permanent since new problems constantly emerge. To suggest that nothing should be done under these circumstances is to ignore the consequences of doing nothing.

There is no alternative to urban development. What is therefore important is not to question the validity of city development, but to make cities and towns a better place to live in. Good city governance, greater involvement of the population in decision-making, more attention paid to environmental hazards are some of the demands that must be met in order to mitigate the problems of the cities. Improvements in environment conditions lead to enhancement of the quality of life and also to economic benefits. Cities are undoubtedly the future for human survival.

The Habitat II City Summit scheduled for June this year, has been convened to address several of these issues. Its success may, hopefully, ensure that in the not too distant future, sustainable human settlements and adequate shelter for all will be an, albeit hard won, victory.

RJR

**M**ost developing countries in the past have been concentrating on strategies for rural development through agricultural development. It was generally thought that such an effort would lead to economic growth and prosperity. This was based on the belief that, 'the potential for growth lies in the development of the rural productive farms which include the technology of production and the skills and productivity of labour'.

It was argued that the urban sector is not self-generative and is incapable of further growth without largesse of foreign technology, managerial inputs and skills. The urban sector in fact, was mandated to be becoming inert and totally parasitic.

- However, past experience has shown that it has proved increasingly difficult to achieve any appreciable level of economic growth through investment in rural or agricultural sector. This is primarily due to some inherent problems associated with the rural or agricultural economy comprising,
- (a) the absence of an economic unit of land for cultivation due to a very low land man ratio;
  - (b) inadequate irrigation facilities and poor water management;
  - (c) low agricultural productivity due to uneconomic and obsolete agricultural practices;
  - (d) low prices for agricultural products, leading to low income and poverty; and



## Urban Development and Economic Growth

by

Prof. Ashley LS Perera

*the failure of the agricultural sector to provide an appropriate stimulus to speedy growth has prompted developing countries to search for alternative growth strategies*

(c) low absorption capacity of labour due to the lack of a diversified rural economy and the absence of one farm employment opportunities, leading to idleness and unemployment and finally, to open unemployment.

There are of course a few suggested capitalist and socialist solutions to the above problem of stagnation of the rural economy the essence of which has been the destruction of the process of simple commodity production by the centralisation of ownership, management and decision-making, either among a few individuals in terms of the capitalist mode of production or among collective entities in terms of the socialist mode of production. While these solutions have been generally successful in transforming feudal economies into strong capitalist or socialist economies in the past, such direct transformation to either of the above economic systems is virtually impossible in the modern context due to obvious reasons.



Most developing countries which are by and large mixed economic systems, need new approaches of economic growth essentially within the prevailing socio-economic, political and juridical framework of the respective countries, perhaps with minimum reforms.

This need for the search for such growth strategies has received an added urgency by the repeated failures of the agricultural sector to provide an appropriate stimulus towards speedy growth and development which has caused most developing countries to search for alternative growth strategies. Industrialisation has been popularly regarded as being synonymous with economic development by the governments of developing countries. While agriculture has been considered an inherently less productive occupation than the manufacturing industry, the orthodox view that the under developed countries should specialise in primary export production



U R B A N I S A T I O N

for which they have a comparative advantage has also been rejected, mainly due to price fluctuations in primary products. The all-out drive for industrialisation has also been embarked on the belief that the manufacturing industry can absorb the surplus rural labour. The initial versions of the balanced growth theories therefore were mainly concerned with balanced growth within the manufacturing sector. However, there has been a shift of emphasis subsequently, to the broad inter-sectoral balance between the agriculture and manufacturing industry. This approach has been advocated by the balanced growth path theory which observed that the rate of growth of an economy cannot be sustained without a simultaneous expansion in its slowest-moving agricultural sector.<sup>1</sup> In the meantime, attention has also been focused on a theory of unbalanced growth which anticipates the growth generated from one sector to have a multiplier or spread effect on the other sectors of the economy. Developing countries have been experimenting with these options without much success.

While these efforts are still on-going, most developing countries are currently experiencing an exodus of their population from rural to urban areas in search of employment opportunities, housing and other facilities. Thisodus of population is a consequence of push factors arising from a stagnant rural economy, rather than pull factors, since the urban economies of these countries are not in a better position to absorb the migrant rural population. This is because the Third World cities are saddled with certain typical problems that require attention. Their economic base is weak, with no capacity to absorb migrant labour except on a very casual basis. The available infrastructure facilities in these cities have already surpassed their threshold limits and are inadequate even to service the existing population, let alone the needs of any additions to the population. Consequently, the migrant population invariably squat on marginal land in the cities and their outskirts and depend on casual employment in the city, causing urban sprawl and associated environmental hazards. Often, the migrants squat on environmentally sensitive areas such as wetlands, thereby adversely affecting some of the most productive ecosystems.



The consequences of an unwise migrant population to cities have thus created in their wake a multitude of community problems in the spheres of health, sanitation and environment manifested in the form of poverty, crime, disease, environmental pollution and environmental degradation.

#### Rationale for Urban Development

It is now increasingly felt that growth strategies based purely on economic sectors such as agriculture, industry and services in the national economy without giving due consideration to the spatial arrangement of activities, are inadequate and less likely to create the necessary conditions for economic growth. It would soon timely to abandon growth strategies which lack a spatial dimension. Space should not be treated as a constant factor in the growth equation. Growth strategies which are not spatially related are not only superficial but have also proved to be less likely to succeed.

In most developing countries, the reality is that there is a movement of people from rural to urban areas. Even in developing countries like Sri Lanka where such a movement of people is not very significant, there is still a need to induce surplus rural labour to move out to urban areas to make agriculture

economically viable. Consequently, it has become essential to ascertain growth not only in terms of economic sectors but also in terms of spatial sectors such as urban, rural and estate. While rural development strategies could effectively incorporate agricultural development, urban development strategies could provide the stimulus for industrial development. Growth strategies should therefore ideally take cognizance of these spatial sectors and seek to achieve complementarity among the activities carried out in these spatial units in the growth process. The rationale for urban development in the growth process arises *inter alia* from the need to provide productive employment to a surplus rural workforce in urban areas.

#### Meaning of Urban Development

Urban development could be broadly defined as the promotion of integrated planning and implementation of the economic, social, environmental and physical development of urban areas. This is implicit in the Urban Development Authority (UDA) Law No. 41 of 1978. Further, urban development may be construed to give explicit expression to a strategy for industrialisation by the provision and/or strengthening of infrastructure facilities appropriate for industry. Investment in physical infrastructure in a planned manner is in fact fundamental to urban development.

Urban development is usually undertaken in the form of integrated projects to achieve multifaceted objectives. For instance, the mere provision of infrastructure to sites or the granting of specially indiscriminate tax incentives, tax concessions or tax holidays are not likely to promote urban growth. Urban growth and development need an integrated planning approach. Initially, potential urban areas should be selected on the basis of sound locational criteria. Land development and the provision of physical infrastructure should be determined on the basis of thresholds adequate to confer agglomeration economies. The integrated planning of several fund uses comprising industrial and warehousing sites, commercial and service areas, housing, utilities and facilities should be carried out to avoid conflicts and provide population thresholds for

services, amenities and facilities. However, unlike in the orthodox New Towns concept there should be some flexibility in land use zoning and provision for cross-subsidisation for equity purposes.

### Sri Lankan Context

A substantial subsistence sector saddled with low productivity and characterized by the existence of zero marginal productivity of labour is typical of most developing countries, which has resulted in a continuous flow of people from rural to urban areas in search of employment opportunities. However, it should be noted that although the problems of these developing countries tend to be similar in many respects, they are nevertheless not the same. It is therefore essential to closely examine the nature and magnitude of the problems besetting each country separately, devoid of generalisations which could distort the real issues. In dealing with development issues it is vital to be country-specific and time-specific.

Hence, for an analysis of issues in the Sri Lankan context, Sri Lanka has a total land area of 65,525 sq. km which is 6.5 m ha or 16.2 m acres. It has an estimated population of about 18 m people (1995). The land-man ratio is therefore about 0.85 ha (less than one acre) per person. However, this gross per capita land extent is significantly reduced when land not available for agriculture which accounts for as much as 48.6 per cent of the total land extent in the country is taken out.<sup>2</sup>

Sri Lanka is a relatively small country but in terms of population size, it is



on par with countries much bigger in size. For instance, Australia with almost the same population as that of Sri Lanka is 117 times bigger in size and Malaysia, also with a similar population size is five times the size of Sri Lanka. This further illustrates that the magnitude of the problem in relation to the relative scarcity of land is more acute in Sri Lanka, requiring the concentration of population in appropriate areas with the provision of non-farm employment. However, unlike in most other developing countries, there is no substantial movement of people from rural to urban areas. There is however migration for foreign employment which in recent years has played an important role in helping to eliminate the labour surplus in the short term.

While the agricultural sector still continues to provide about 44 per cent of the total employment in the country, its share in the GNP has recorded a steady decline, from 29 per cent in 1970 to 21 per cent in 1993. The manufacturing sector which accounted for about 14 per cent of the total workforce contributed 19 per cent of the GNP in 1993. The service sector on the other hand, accounted for 27 per cent of total employment and contributed 50 per cent of the GNP in 1993. It is also observed that there is a gradual decline in the relative share of employment in the agricultural sector over the years, and an increase in the shares of the service and manufacturing sectors.<sup>3</sup>

All these factors indicate a gradual process of change in the economic and employment structures of the country. What is required is to accelerate this process by introducing appropriate spatial strategies in conjunction with other monetary and fiscal reforms for complementary urban and rural development.

Since the late 1970s, there have been some positive steps taken in the direction of urban development. In fact, urban development has been one of the leading projects in the government's agenda. Despite some fundamental problems the momentum is still being maintained, and this is encouraging.

The total investment in urban development which was Rs. 338 m in the previous year, doubled to Rs. 705 m in the current year. The increased investments were largely reflected under integrated urban development projects. A further sum of Rs. 91 m has been incurred on the purchase of underdeveloped or unutilised land by the land bank of the HUDA. While urban and rural housing are currently receiving attention under the Urban/Rural Housing Sub-Programmes (UHSP and RHSP), the expansion and upgrading of the existing telecommunication network is underway. There is also currently an Asian Development Bank (ADB) aided project for the provision of infrastructure facilities in some selected towns.

It is too early to assess the impact of all these projects which are currently on-going in operation. However, the absence of an overall spatial strategy, shortcomings in terms of institutional and spatial integration and the lack of a mechanism to achieve complementarity in urban-rural development *inter alia* have frustrated government efforts to accelerate urban development and economic growth.

### Concept of Development for Growth

Initially, it is essential to create a hierarchical order of urban settlements, or in other words, there is a need for the creation of an articulated and integrated system of settlements comprising towns of different sizes and functions that are large and sufficiently diversified to serve not only their own residents but those of surrounding areas as well. These towns in turn, should be viewed as essential nodes of trade and commerce within a large network of market centres, providing more diversified and higher order goods and services. The economic base of these town centres should be strengthened by a strategy of dispersed industrial investment through the provision





and/or augmentation of infrastructure facilities.<sup>6</sup>

These town centres would ideally not only assist the rural sector by creating a demand for agricultural products for agro-based industries, but also help absorb surplus rural labour. However, the removal of surplus agricultural labour alone is insufficient to increase productivity and ensure an agricultural surplus in the rural sector. In this connection, it is useful to emulate the Japanese, Taiwanese and South Korean models where increased agricultural production was achieved by the promotion of research and the development of better quality agricultural methods of a labour-intensive and land-saving character. The newly established Rajarata University could, hopefully, spearhead the new technological advances and introduce appropriate know-how to increase agricultural productivity and boost the rural economy.

Such an urban-rural development approach will provide for complementarity of the sectors and create favourable mutual interdependence, resulting in a faster rate of economic growth. This concept of development and growth is backed by the findings of an urban sector study in Sri Lanka carried out by a team of experts of the Asian Development Bank (ADB). This study observed that, 'in order to achieve a more equitable distribution of economic activity and growth and assist in the development of high-value agriculture-based exports, regional centres or secondary towns should be targeted for development'. It further suggested that '... these towns will be



centres for agro-processing industries, distribution activities and secondary investment, producing intermediate and final goods'. The study further observed that '... a number of secondary industries could be export-oriented if appropriate physical and social infrastructure were provided'.<sup>7</sup>

Economic growth no longer takes

place within the confines of a country. International dependence has now become a necessary evil in the growth process. In this context, it would seem that the demonstration effect associated with the concept of consumer behaviour in economics is catching up with cities in the developing world, in their modernisation efforts.

Given the impact of globalisation, informationalisation and internationalisation, it is unrealistic to assume that cities in the developed and developing world will tread along different paths in water-tight compartments. It is more likely that cities in the developing world will catch up with their counterparts in the developed world at least in some respects.<sup>8</sup> This augurs well with the open economic policy pursued in Sri Lanka.

In a recently concluded study, it was observed that, 'the increasing globalisation of the market would be the key factor for Sri Lanka's future economic environment.' While observing that globalisation is inevitable, the study stresses the need for an assured supply of technological and managerial skills and the guarantee of an adequate infrastructure base. It further observed that, '... a balanced and socially sustainable growth of the economy would require due attention to be paid to the development of a modern agricultural sector.'<sup>9</sup>

It can hence be concluded that the prospects of economic growth and rural development rest to a considerable extent on urban investment. ■

#### Notes:

1. de Silva, GVS, 1979, *Some Heretical Thoughts on Economic Development*.
2. de Silva GVS, *Ibid*.
3. Myint H., 1978, *The Economies of Developing Countries*.
4. Perera A.S., *Some Long Planning and Development Issues in Sri Lanka with Special Reference to the CTA*.
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8. Perera A.S. 1995 - *Urbanization and Urban Research in Sri Lanka*, CRUS.
9. CRUS 1995 - *Sri Lanka: Year 2000 - Towards the 21st Century*.



# Urban Development Sector Project for Financing Urban Infrastructure

by

W. A. Siriwardena

Presently, there is an acute shortage of essential infrastructure in all urban areas in the country. Four instances of existing infrastructure have worsened environmental and development problems in our towns. The infrastructure deficiencies in the urban areas are evident from the lack of drainage, narrow and poorly planned roads that create traffic congestion, towns not served with water or with poor intermittent water supply, and low income settlements without basic services. The bus stands and public markets are either poorly located or congested due to the lack of planned development. The public agencies are finding it very difficult to overcome these development issues due to the lack of resources. Also, the demand on public and private financial resources to deal with this situation has become formidable. The Urban Development Sector Project has evaluated that the share of urban population has already reached 46 per cent of the total population. Concentration of population in urban areas demands more resources to deal with the supply of basic needs. Recognition of this situation, an infrastructure investment programme costing Rs. 1,800 for selected 17 small and medium towns in Sri Lanka has been launched by the Urban Development Authority of the Ministry of Housing, Construction and Public Utilities with the assistance of the Asian Development Bank, to improve urban livelihoods for economic development, the standards of urban living and the environment. The programme includes the development of the basic needs of urban communities such as roads, water supply, sanitation, storm water drainage and solid waste management services for low income settlements, bus parks, walkways, and market available sites for building and industrial development.

The practice of financing urban infrastructure is the responsibility of the Government agencies. The Government makes available capital for the financing of this infrastructure as budgetary transfers to the infrastructure development agencies.

As the Government provides capital grants to urban local authorities. The prevailing practice allocating such capital grants shows that allocation has primarily been to support very small projects to meet minor expenditures of infrastructure development. For the first time in the history of local Government in Sri Lanka, the Urban Development Sector Project (UDSP) has introduced a special grant programme to the urban local authorities for funding infrastructure developments. The funding arrangements of UDSP is through long-term credit provided by the Asian Development Bank. Under the terms of the Loan Agreement, the Government of Sri Lanka, the borrower, will make available the proceeds of the loan to the Urban Development Authority for carrying out

infrastructure development projects. The long-term borrowing should be confined to the financing of investment in permanent works and equipment intended to provide a future flow of benefits to the society. The UDSP investment programme financed by long-term borrowing, ensures an investment of permanent capital works, land and equipment.

Hence, project funds are available for upgrading water distribution systems, installing small and simple sewerage systems and the constructing solid waste disposal sites, reconstruction and repair/renovation of roads, bridges and intersection improvement and drains, upgrading low income communities and providing lowest sanitation for low income families. Funds are available in the form of loans and grants as follows:

(A) **Loan Facility** : with interest at the rate of 10 per cent with a repayment period of 22 years, including a grace period of 2 years. The UDA could lend this money to the implementing agencies at the rate of 12 per cent.

(B) **Grant Facility** : available to UDA as a budgetary transfer. The UDA should provide the proceeds of the loan to the implementing agencies in: Water Supply and Drainage Board, National Housing Development Authority, Road Development Authority and selected 17 urban local authorities for financing the sub-projects as follows:

1. **Loan Projects: 100 per cent loan**
  - \* Low income housing sites
  - \* town centre sites
  - \* small industrial sites

All these sub-projects require an equity contribution from the local authority. If the equity is made in the form of land, then 100 per cent of the construction cost will be a loan. This equity contribution could also be made in the form of labour or monetary contribution.

- 50 per cent loan, 50 per cent grant
  - \* water supply
  - \* pipe-borne sewerage

2. **100 per cent grant projects**
  - \* roads, bridges and intersection improvement
  - \* low cost sanitation
  - \* solid waste management
  - \* clean and slum upgrading

3. **40 per cent loan, 40 per cent grant and 20 per cent equity**
  - \* Supply of construction and O & M equipment

The beneficiary towns under the UDSP financing programme are Galle, Kurunegala, Kūlyapitiya, Nuwara Eliya, Ratnapura,

Trincomalee, Amarapura, Randaravala, Chilaw, Gampola, Hambantota, Matara, Ambalangoda, Moonsgalla, Polonnaruwa, Waligama and Alutgama.

Capital financing of infrastructure is not an easy task. The basic source of financing should be either from government sources of funding or private sector financing. Private sector participation in the financing of public infrastructure is an innovative area for consideration. However, the private sector investor looks forward to the Financial Internal Rate of Return for his capital investment. In this respect, accepted methods such as Build Operate Transfer (BOT) and Build Own and Operate (BOO) can be cited as well-known practices. These methods are based on the principle that the user must pay for the services rather than by subsidizing the principal. The other possibility of encouraging private sector investment in infrastructure development is the use of publicly-owned land in exchange for private sector financing of infrastructure. In this case, the land should be a potential unit of exchange against anticipated investment. Such potential units of land could be created through innovative new city developments, new industrial site development, commercial area development and urban renewal projects. The UDSP creates an environment to promote private sector participation for development in the above project towns.

The UDSP is a public sector investment programme. For the sub-projects to become feasible under UDSP, the borrowing period should be related as close as possible to the working lives of the assets to be financed and to their ability to efficiently deliver the benefits flows; the loans have to be repaid, together with all interest within the working lives of the assets. All expenditures relating to the current delivery of public infrastructure services including the operation, maintenance and debt service on fixed assets, should be met on an annual basis from sources of growing local revenue.

The financial components such as encouraging the urban local authorities to undertake small investment projects up to Rs. 10 m in infrastructure, increasing the coverage of recurrent expenditure from self sources of revenue of the ULAs to improve the self-financing ratio, encouraging the ULAs to revise the property taxation percentage annually to strengthen accounting and budgeting procedures and introduce depreciation accounting and to prepare a management action plan as a condition for receiving capital assistance will be addressed.

### About the Writer

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# Urban Planning and Development Control: The Sri Lankan Experience

by  
Neil G. Karunaratne

**P**lanning is undertaken in various spheres. A contemplated activity may be planned by an individual, or planning can be undertaken by the Government. Tufield is of the opinion that the world over, central and local Governments undertake planning (i.e. predicting the future in order to formulate normative policies to influence it). In Government, planning is undertaken in many sectors, with appropriate methodology and techniques. Some are short term, some long, some highly centralised, some highly diffused, some integrated with other sectors and some not. By definition, the Government seeks plans which integrate all sectoral activities in terms of the implications for one all-pervasive element, namely, land use and development, and in so doing has to consider the requirements of the whole community.

### Urban Planning Defined

Urban planning or land use planning, falls into the category of Government planning and conveys a pre-occupation with the allocation of uses on the earth's surface. Planning is usually undertaken where resources are limited in order to achieve optimal benefits by exploiting these resources and is essentially concerned with the propositions for carrying out development, i.e. the changes in uses on the surface of the earth as the platform for man's changing activities. In order to influence the future, the Government must take steps to place in the hands of the authorities, powers to initiate, stimulate, guide, regulate or prevent certain activities on land.

When the benefits that accrue to a community are considered, planning invariably pervades individual rights and would even be seen as interfering with one's legitimate rights. This aspect is more explicitly seen in urban areas where, due to the concentration of population and the agglomeration of various activities, the main resource, i.e. land, gets increasingly limited. Since the total supply of land is fixed,

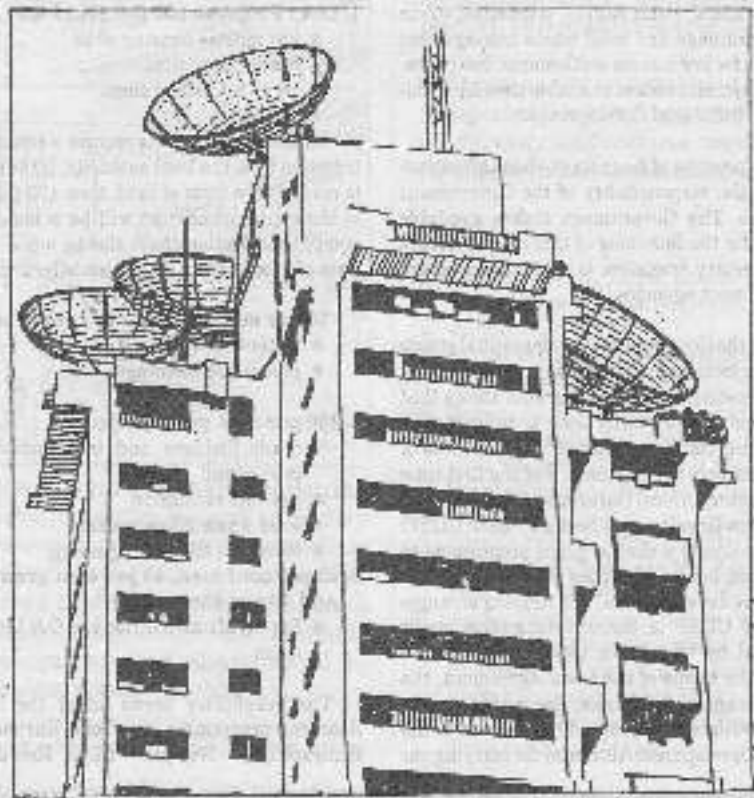
*if urban planning is not undertaken for the optimum utilisation of land, the consequences can be serious*

there is a special concern that land should be conserved and used as efficiently as possible. This represents the notion of the scarcity of a resource. When urban activities get more and more intensified, the scarcity gets much more conspicuous. So when urban development increases, the tendency is for vertical expansion in construction which provides a substitute for additional quantities of land. Therefore, in urban areas, planning becomes a *sine qua non*. As such, intervention by Government becomes very significant as against individuals' profit-oriented endeavours. When Governmental activity affects people's rights, it has to be backed by legislation. Otherwise, there could be

arbitrariness and discrimination. Planning legislation is a body of collective laws which express the will of the legislature and act not only as controllers of development but also as promoters of development. This aspect has been clearly spelled out in the Nicusian Seminar on Planning Legislation, in 1952. (The Urban Development Authority Law also embraces both these aspects: control and promotion of development).

### Development

It is pertinent to discuss the term *development* before interpreting development control. The term *development*



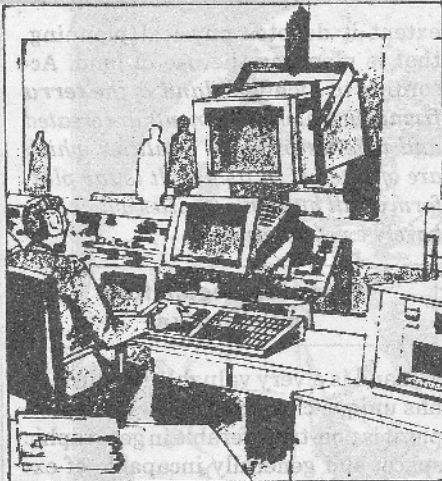
comprises a very wide meaning covering the socio-economic, physical and environmental aspects. As observed by Lichfield, by *development* is meant bringing together all factors of production concerned with physical development (land, development agencies, construction industry, finance, etc.) needed for city building, matched to the needs and demands of the users. Therefore, it emphasises that *development* is a multidimensional changing process directed at attaining a better standard of living for the members of a community. In the field of urban planning legislation, the term *development* is more oriented towards physical development on land. This is clearly seen from the following definition of the term *development activity* given in the UDA I aw:

*" 'development activity' means the parcelling or sub-division of any land, the erection or re-erection of structures and the construction of works thereon, the carrying out of building, engineering and other operations on, over or under such land and any change in the use for which the land or any structure thereof is used, other than the use of any land for purposes of agriculture, horticulture and the use of any land within the curtilage of a dwelling house for any purpose incidental to the enjoyment of a dwelling house, not involving any building operation that would require the submission of a new building plan. "*

Urban spatial planning in addition to physical development consists of the attributes of socio-economic, environmental and institutional development as well. This is asserted by Lichfield when he says that, *'physical development has its socio-economic implications and from the regional and national level, the growth with which that development is concerned cannot take place without the contribution of buildings and infrastructure provided by the physical development. Increase in productivity and output cannot be provided without the built fabric which is to house the machinery and labour.'* This concept has been adopted in the preamble in the UDA law as well.

#### Development Control

The term *development control* has most often been interpreted in a

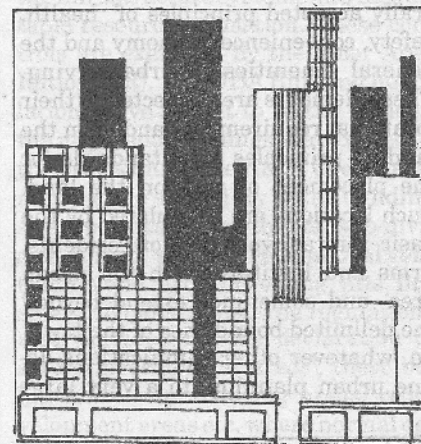


negative manner, and is superficially accepted as minimising or thwarting development. Control, coupled with building regulations and the like, operates in respect of, and affects all types of development since it is used to ensure that either development does not occur, if unsatisfactory, or if it does, it then proceeds in accordance with conditions which will make it satisfactory. Interpreted in a positive sense, development control tries to achieve a desired goal by using it as an instrument to manage activities in respect of development. In other words, it lays down the guidelines for development in a particular area. Used constructively, that is, looking at development control in a positive manner, it can secure good development. If, for example, used with guidelines prepared by authorities as to what they would wish to see in future on the land in question. The policeman on beat duty who controls traffic at a busy junction can be cited as an analogy; he does not obstruct the traffic, but guides them in a smooth flow so as to reduce the problems of congestion.

#### Origin of Urban Planning in Sri Lanka

Urban planning has had a chequered history. It has been practised by early civilisations in Mahenjodaro-Harappa, Egypt, Rome, and even in Anuradhapura. But urban planning as it is known to-day, is of comparatively recent origin, prompted by the industrial revolution in the West, by the concentration of industries and migration of people in large numbers to the centres of production. In Sri Lanka too, from about the fourth quarter of the last century, the export-oriented and port-centred activities especially

in Colombo brought about a similar phenomenon. The exporters of tea, rubber and coconut products required their workforce to live in close proximity to the Colombo port and they accommodated them in rows of tenements as well as in tenement gardens. These row houses and tenement gardens although fast disappearing, are seen to this day in certain areas in Colombo, especially in the Mutwal, Grandpass, New Bazaar, Dematagoda and Kompannaveediya wards. These structures have been built without the slightest regard for sanitation and the health of the inmates and today, over a century later, are seen as being obsolescent, squalid, insanitary and unhygienic dwelling units, lacking even the basic amenities required by the occupants. The Government, in a bid to streamline the construction of dwellings, enacted the Housing and Town Improvement Ordinance in 1915. This ordinance made provision for two types of measures to achieve this goal: preventive measures and remedial measures. The former can be considered to be development control measures although the term was not used very strictly. Under this Ordinance, the chairman of a local authority was given



wide powers for the regulation and control of the construction of buildings or any other related service or amenity to a building. The more important matters for which the chairman could use his power are the construction of buildings, development of land, laying of streets and zoning of areas for residential, commercial, industrial and any other special character. He is empowered under this law to *'make such regulations with reference to buildings in such area as may be necessary to preserve its amenity or to facilitate and secure the purposes for which any such*

reservation is made.' As regards the construction of buildings, a Schedule in the Ordinance gives the standards to be followed, the main matters being the height of the building, the proportion of site to be built upon, size and ventilation requirements of habitable rooms, open space around the building, access roads, width of streets upon which buildings could be erected, etc. It was made possible for the local authority to enforce the provisions of the law, and any violation of these provisions was considered a contravention of the law, with penalties enforced.

#### Urban Planning versus Development Control

It is pertinent to point out that urban planning and development control are not synonymous. The latter is one of the tools in the urban planning process. Development in any urban area is guided by the land use plan prepared by urban planners. The land use plan gives direction for guided physical expansion and renewal of the whole or part of a town. The land use plan therefore embodies a proposal in respect of future expansion and renewal, recognising local objectives and generally accepted principles of health, safety, convenience, economy and the general amenities of urban living. These elements are connected to their locational requirements and form the guiding principles and standards for the placement of uses on the land. Such locations are articulated by the basic interactive needs of residents, firms and institutions in the urban area and sometimes extend beyond the delimited boundaries of the town. So, whatever other ramifications define urban planning, to a very large

extent it denotes physical planning, that is planning the use of land. According to Lichfield *land is the terra firma on which settlements are created and it is its physical qualities which are of interest in its use. It is the platform of all human activities which can barely exist otherwise.*

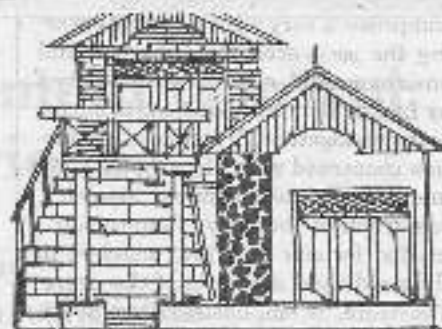
#### Planning Legislation in Sri Lanka

Land is a very valuable resource. It has unique characteristics. For example, it is non-transferable in geographic space and generally incapable of expansion of supply and has an unmatched relationship with all other sites, fragmentation may deter its most efficient use etc. Such characteristics make the planning of land uses a very complex one. Even escalating land values are a direct result of this unique nature of land.

Urban planning has to create the environment to increase the potential for developing land. The land-man ratios in urban areas is very low. For example, in the city of Colombo, it is very critical, the gross ratio being slightly over two perches per person.

This itself is a manifestation of the acute shortage of land and its high demand.

With a view to undertaking planning in a much wider or macro scale, the Town and Country Planning (T & CP) Ordinance was enacted in 1948. According to the preamble of this Ordinance, the main purpose of the law is to 'authorize the making of schemes with respect to the planning and development of land in Ceylon (Sri Lanka), to provide for the protection of natural amenities and the preservation of buildings and objects of interest or beauty, to facilitate the acquisition of land for the purpose of giving effect to such schemes, and to provide for matters incidental to or connected with the matters aforesaid.' This piece of legislation is clearly seen as a forerunner of planning in Sri Lanka. According to this law, a planning scheme could include, among others, the zoning of areas for various categories of activities (residential, industrial, commercial etc.) restriction of the use or development of land so as to preserve places of religious, historical, architectural, ar-



chaeological or artistic interest, the regulation and control of the construction of roads, slum clearance, development control through building regulations, provision of infrastructure services, improvement of amenities etc. The First Schedule of this enactment details the matters for which provision may be made in a planning scheme. Thus, planning seeks to achieve orderly development through these provisions, some of which are development control measures (e.g. Section IV of the Schedule which provides 'for the restriction, regulation, and control of the erection, revision, alteration, demolition and the use of structures'). So it is seen that, concurrently with the H & TI Ordinance, the T & CP Ordinance also provided that development control measures should be adopted when dealing with land planning. From the provisions given in both Ordinances, it is evident that the primary objectives of development control measures are, (a) securing health, safety, welfare, conveniences and amenities for the people, (b) increasing efficiency, and (c) maintaining equity. Also of importance will be the maintenance of the ecological balance, the adaptability to urban dynamism and the resolution of conflicts.

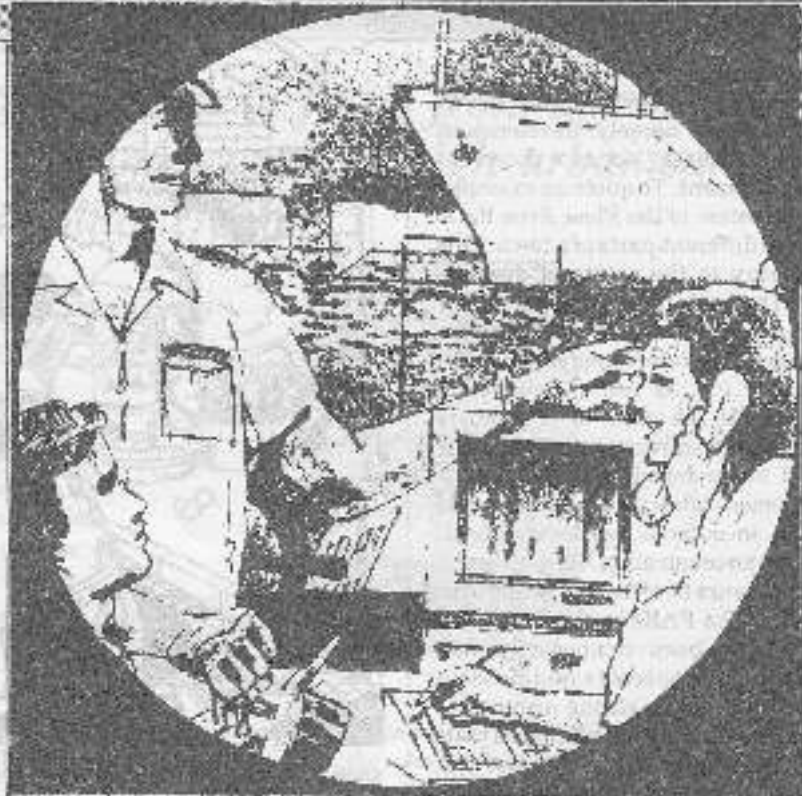
However, the two Ordinances were enacted when urban development in Sri Lanka was at a very early stage. Rapid urbanisation, specially in areas such as Colombo, has given rise to several complex urban problems such as pressure on land, the existence of slums and shanties, construction of high-rise buildings, traffic congestion etc. The existing legislation could not keep pace with the fast-changing urban scene. To deal with new and emerging situations, further legislation was inevitable. Thus, the Urban Development Authority (UDA) Law of 1978 was enacted and a new institution, the Urban Development Authority, was established to carry out development activities in declared urban areas. With



the enactment of this law, planning which was predominantly physical in nature, turned towards a new direction of integrated planning. The UDA was thus empowered to *promote integrated planning and implementation of economic, social and physical development of certain areas as may be declared by the Minister to be urban development areas ....* (Preamble).

Wide powers were given to the UDA to undertake this multi-faceted task. Additional provisions with regard to planning and development were also made by subsequent amendments to the law, specially the enactment in 1982. The law also authorized the Minister to make regulations, and the UDA Planning and Building Regulations 1988 contained in detail the development control measures. These regulations, which have been gazetted, were to be incorporated *mutatis mutandis* in all the development plans of declared urban areas, as could be clearly seen in the City of Colombo Development Plan (Volume II). A development plan that is prepared by the UDA becomes a legal document once it is approved by the minister and is published in the Gazette. Enabling legislation is there for the UDA to formulate rules in respect of development activities in urban areas. They become effective only on approval by the Minister. Further, the UDA has also the authority to issue circulars and directives to local authorities. Whereas the UDA law and its amendments are considered to be the principal legislation, the regulations, rules, circulars and directives fall into the category of subordinate legislation.

According to the law, the UDA should develop every development area for the better physical and economic utilisation of that area. Thus, the centralisation of power and authority within the UDA became an insurmountable obstacle, especially when considering the work involved with planning and development, including development control of all urban areas in the country, even going to the extent of approving a building plan and issuing a certificate of conformity. This problem was minimised by decentralising functions to the Urban Local Authorities (ULAs), and only problem cases were referred to the UDA for suitable action. However, the functions of the ULAs are subjected to the general



guidance, supervision and control of the UDA. According to this arrangement the *UDA will be mostly engaged in the planning, co-ordination, monitoring, evaluation, training and research while the Local Authorities will carry out the preparation and implementation of Town Development Plans, approval of building plans and taking action against unauthorised construction.*

#### Development Control Regulations

The Planning and Building Regulations that are gazetted and also incorporated as an integral part of the Development Plan are a vast improvement on the provisions in the H&TI and the T&CP Ordinances. The planning regulations have two aspects, namely, promotional and regulatory.

The promotional aspect is concerned with activating development, and consists of proposals such as improving or expanding infrastructure networks, the provision of amenities, development of housing, upgrading of slum areas, establishment of industrial areas, creation of social and recreational facilities, conservation of places of historical interest, etc. On the other hand, the regulatory aspect concerns the zoning of the urban areas into different categories of land uses and densities.

Density zoning is a comparatively new concept in planning in Sri Lanka. It became necessary in congested areas in order to deal with the problem caused by traffic congestion, heavy strain on the infrastructure systems and inequitable resource utilisation. These controls are exercised by the Floor Area Ratio (FAR). The UDA Building Regulations have sought to rectify some of the major shortcomings that existed in the provisions of the H&TI Ordinance, namely, the suitability of the building site, specification as to lots, sub-division of land, parking, mechanical ventilation and air conditioning, lifts, fire safety, to name a few. The regulations also provided for the declaration of *special development areas*, these being low-income housing areas, redevelopment areas etc. where normal development control regulations will not apply, but area and activity-specific regulations can be framed.

#### A Critique of Development Control Measures

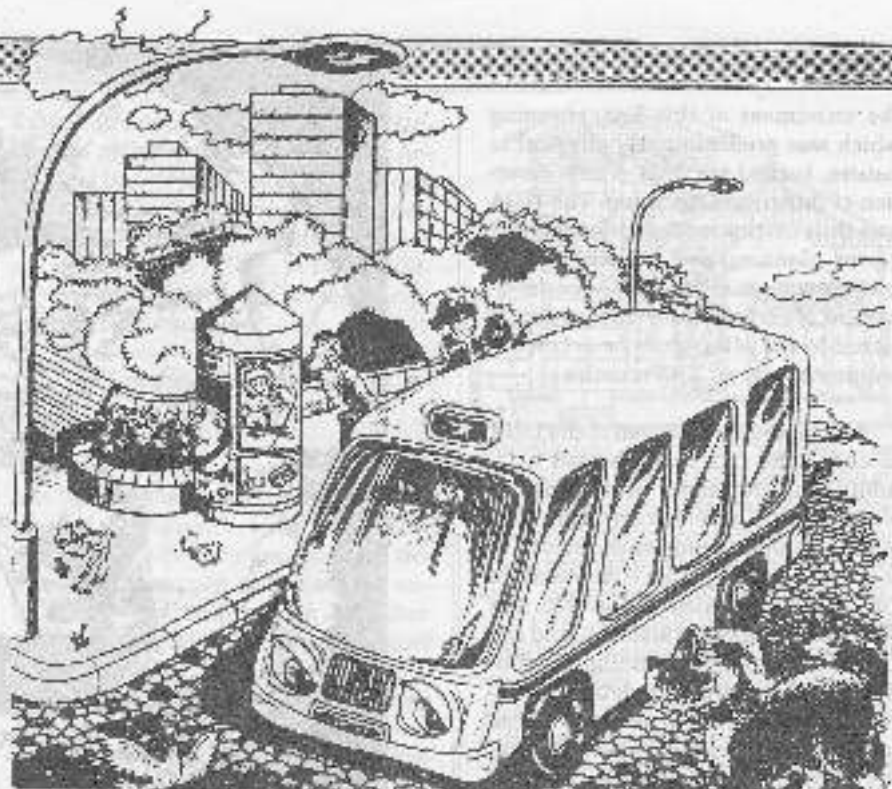
That some controls are necessary for the planned development of an urban area is a point not debatable. Prior to publishing the regulations, all aspects (both positive and negative) will have to be researched before they become law. Otherwise, the very purpose of formulating the regulations (in the name of development) will become a

self-defeating exercise. Certain regulations and provisions in urban development plans, namely, development control measures, act as a deterrent for development. To quote an example, the imposition of the Floor Area Ratio (FAR) in different parts of a town. This is contrary to the notion of development. The basis on which the FAR for an area is decided, i.e. the lack of infrastructure like water supply, sewerage, electricity etc., is not a very sound principle. If the plan is to provide development, infrastructure planning should be undertaken before actual development takes place. A plan should provide incentives for development, rather than constraints. Then only will entrepreneurs be attracted to invest in the area. The FARs in the city of Colombo have been temporarily suspended in order to boost rapid development. If there are strong arguments for not allowing a particular area to be developed, the investor should be provided with suitable alternative sites to locate his enterprise. This should be the essence of planning. This applies in land use zoning too. The entrepreneur should be made aware of the incompatibility of his project in the area of his choice, and the solution again would be to indicate an alternative site. The FAR and zoning mentioned above are but only two instances where, in the name of development control, actual development will be restricted.



This is detrimental to the country's economy especially, under the open economy system, and with the Board of Investment of Sri Lanka (BOI) incentives and the vision of achieving Newly Industrialised Country (NIC) status in the foreseeable future, the task of the Government should be to attract more and more investors. It is imperative therefore that the Government provides a package of incentives.

Gone are the days when the urban planner abided by strict rules and regulations in respect of development control. He has had to emerge from this static role and act in a more dynamic and innovative manner. In the



case of urban planning too, the rigid master plan or blue-print plan concept has been discarded and a more flexible system, the structure planning system, adopted. The planner too should be responsive to the changing urban scenario around him and be flexible to adapt himself to such situations. In other words, his task would mainly be confined to the provision of physical and infrastructural requirements for the comprehensive and integrated development of an area, with due consideration being given to the maintenance of a congenial living environment. Then only will urban planning achieve the desired objectives and begin its true meaning. ☒

In conclusion, it is pertinent to quote McAusland. In his book titled 'The Ideologies of Planning Law' he says that, 'the organisation of planning cannot be divorced from the questions about the organisation of society. In discussing the need to plan and how to plan we must confront the choice which society may make between forms of social organisation which are highly centralised and authoritarian, and forms which leave people to settle their own affairs as much as possible in their workplaces and communities. Whether society moves towards one alternative or the other, or some combination, planning becomes involved in the need to reconcile the attainment of individual freedom with an equally collective freedom in the wider community.'

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#### About the Writer

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*the Sri Lankan economy's shift in focus from agriculture to industry has been a prime cause of high urbanisation in the Colombo metropolitan region, says UDA Director General*

*Economic Review in conversation*

*with N.D. Dixon*

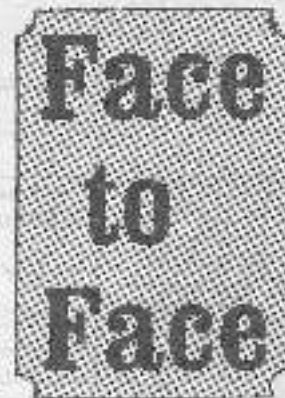
**Q:** *Presently, we have the situation of a high concentration of population in the Colombo metropolitan region. Why is this? How does the UDA propose to address this problem?*

**A:** Urbanisation in Sri Lanka has been completely unplanned. What we are trying to do is to bring about some balance, from an unbalanced situation to some kind of planned development. It may not be completely planned development but at least there will be certain basic requirements which will be met.

The UDA's efforts alone are not enough. There must also be investment to go along with the master plan. People cannot be ordered to go from place to place unless they are provided with suitable infrastructure.

For instance, we discourage major industries from being set up in Colombo. They are encouraged to go to the Biyagama Free Trade Zone or to the Homagama or Katulana areas outside Colombo. In Peliyagoda, Homagama and Prosdura we have constructed big industrial projects for this purpose. Similarly, we have shifted government offices and ministries to the city to Kotte and have found suitable locations for this. The Government, despite its limitations, is trying to bring about infrastructure development to achieve planned objectives. We too are trying to disperse activities, reduce traffic and related problems in a balanced manner, without leading to high concentration in the Central Colombo area. Colombo will be developed mainly for its port-oriented and commercial activities.

Historically speaking, Colombo has grown at the expense of other towns. Now the Colombo metropolitan area has the highest population of 2 m., whereas in other centres we don't have more than about 300,000. This imbalance is not very desirable because Colombo dominates and attracts activities from all the other areas. So to maintain balanced development, we want to encourage the growth of other small and medium towns as well. The UDA has initiated a project with the Asian Development Bank, to promote infrastructure development of small and medium towns outside the Western Province. For this, selected 17 towns have been selected after assessment of their potential and future growth prospects. We hope to increase this number to cover other towns as well. The whole objective is to ensure that there is balanced growth.



We are also in the process of revising the Colombo Master Plan and the development plan for the Colombo metropolitan area. The present plan was prepared in 1974, just before the UDA was established, and must be updated now. We have a team of town planners in the UDA to do the preliminary work and we have produced a draft plan for the metropolitan area. We are also trying to update the City of Colombo Development Plan, which is a detailed plan of the Colombo City limits.

The economic factor has also contributed towards the high rate of urbanisation in the Colombo metropolitan area. In Sri Lanka during the past ten years or so, there has been a basic change in our economic development, with greater emphasis towards industrial development rather than agriculture. If you take the GDP break-down, we see very significant growth in the industrial sector and relative stagnation in the agriculture sector in terms of GDP and employment. It is true that we have invested much capital on schemes like the Mahaweli, but we are restricted because our land area is limited. In such circumstances, any additional population will be a surplus. When they don't find employment in rural agricultural areas, they migrate to towns. This cannot be avoided. Therefore, industrial growth has shown a relatively higher growth rate than agriculture. Industrial growth and the growth of services is reflected in the growth of urban areas because industrial development does not occur in rural areas.

It is heartening to note however, that some of the district capitals are now growing, mainly because of regional initiatives because of regional initiatives resulting from the devolution of power to provinces. For instance, according to some estimates we made, the Gampaha district is growing faster than the Colombo district because in Gampaha, there is more land, resources etc. and more employment opportunities generated by the Free Trade Zone area. This is desirable because it avoids high concentration in developed areas and discourages excessive migration to the already developed Western Province.

*Cont'd to page 25*

# Planning for Urban Development in Sri Lanka

by  
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Planning is needed for the sustainable provision of the different needs of a constant and acceptable quality of life. Basic needs that have to be provided for in this manner include food, clothing, shelter, medical facilities, communications, transport and recreational facilities. These needs are met from the service sectors of industrial and service sectors of the economy. The industrial and service sectors are generally identified with the functioning of the urban sector, and the rest with that of the rural sector of the community.

Although different sectors can be identified for practical operational purposes, together they form one system with the individual sectors functioning as subsystems. In such a situation, the efficiency of the whole system depends on the efficient functioning of the composite subsystems. Hence, any planning for the efficient functioning of the whole system needs to consider the importance of the efficient functioning of the individual subsystems and of their linkages between them. In this manner, it will be apparent that planning for the efficient functioning of a particular subsystem has to consider the need for the efficient functioning of the other connected subsystems, together with their linkages.

As the human population increases, planning for the sustainable provision of the different needs of man has to consider the sustained development of the sectors that provide these needs. The population of Sri Lanka, which stood at 2.4 million in the year 1971, rose to 24 million in 1991, and is expected to rise to a peak of 28.4 million by the year 2041.<sup>1</sup> The urban population (i.e. the population living within municipal, urban and town council areas) has risen from 21 per cent of the total to 22 per cent during the period 1971 to 1991. The share of the urban population living within the Western Province has risen from 48 per cent to 57 per cent during this period. In terms of the numbers of persons as at the 1991 census, the principal towns having a population of over 75,000 persons are shown in Table 1.

This shows the concentration of urban population. In addition to the above figures, it is generally implied that the percentage

Table 1  
Towns with a population of over 75,000 persons as at the 1991 census of population<sup>2</sup>

Name of town	Total Population, 1991
Colombo	587,647
Dehiwala-Ellewelliya	174,629
Moratuwa	133,826
Jaffna	112,224
Kotte	101,039
Kandy	97,872
Galle	75,900

of urban type settlements, has been observed during the last few years, mostly in the Colombo, Galle and Kandy districts.

In terms of employment, 48 per cent of the total number employed in 1981 were engaged in the agricultural sector, while only 12 per cent were engaged in the services sector, under manufacturing and construction and 47 per cent in the sectors classified under 'wholesale and retail trade, and restaurants and hotels, etc.', 'transport, storage and communications and financial, insurance, real estate and business services'. In terms of the composition of the total workforce in 1991, the sector classified as 'agriculture, stock raising, fishing, etc.' accounted for 29 per cent, while the sector classified as 'transport and communications, wholesale and retail trade, restaurants, hotels and catering, etc.' accounted for 34 per cent.

It is, of course, not accepted just that as indicators of development, the number of persons engaged in agriculture as a percentage of the total number employed reduces, as it illustrates in Table 2, which compares the position in a few representative countries.

Clearly, the performance of the agricultural sector with reference to the number of persons engaged in the sector, has not neglected the sector, as indicated in Table 2 and 3.

The information in Tables 2 and 3 shows that Sri Lanka's performance in this sector has been below the performance of other countries. Table 2 shows that the performance of the Near East region, within which Sri Lanka is included, has been below that of the world average in most of the developing countries. It is noted that agricultural sector wages in Sri Lanka during the period 1980-1990 have dropped at the rate of 0.05 per cent per year.<sup>3</sup> In a recent World Bank study, Sri Lanka has been listed as being one of the Low Income - Food - Deficit countries.<sup>4</sup> A further study by the World Bank stated that a 'substantial food production will be required by 2025 to satisfy the demand increases from population growth and rising incomes'.<sup>5</sup>

Thus, there is a need for continued attention to be paid to the agriculture sector in Sri Lanka for the development of the other sectors of the economy.

The sustainable development does not

Table 2

Distribution of the Workforce (Percentages)<sup>6</sup>

Country	Year	Agriculture	Industry	Services	Representative Income Group
China	1994	61.0	18.9	21.0	Low
Bangladesh	1989	65.5	16.5	19.0	Low
India	1991	63.2	13.2	22.6	Low
Pakistan	1992	47.4	19.8	32.7	Low
Sri Lanka	1988	49.1	18.1	32.8	Low
Malaysia	1994	9.0	29.8	46.8	Middle
Thailand	1989	36.3	11.9	51.8	Middle
Cuba	1981	32.2	40.3	27.8	Middle
Netherlands	1991	34.5	25.7	70.2	High
Switzerland	1989	36.9	39.3	64.7	High
United Kingdom	1990	32.1	28.7	69.2	High
United States	1991	32.8	25.8	71.3	High



Table 3

Agricultural Production - Food (With index for 1979-81 as 100)<sup>9</sup>

Country	Index for the years				
	1988	1989	1990	1991	1992
China	140	144	157	162	168
Bangladesh	114	125	127	130	132
India	140	148	149	152	157
Pakistan	140	150	155	161	167
Sri Lanka	101	97	105	98	98
Malaysia	187	211	224	244	255
Thailand	124	129	120	130	123
Cuba	110	111	108	112	93
Netherlands	111	119	113	117	121
Switzerland	107	115	111	112	113
United Kingdom	106	109	111	115	113
United States	94	104	106	104	114

Table 4

Per Capita Food Production (With Index for 1979-81 as 100)<sup>10</sup>

Region	Index for the years				
	1988	1989	1990	1991	1992
World	103	106	106	104	105
Developed Regions	100	104	104	100	101
Developing Regions	111	112	114	115	116
Near East	100	92	99	97	98

Table 5

Land use pattern<sup>14</sup>

Land use type	Area in Hectares	Percentage
Total	6,561,000	100.0
Agricultural land	1,642,000	25.0
Homestead	781,000	11.9
Sparsely used land	1,289,000	19.6
Forest and woodland	1,779,000	27.1
Scrubland	502,000	7.7
Others (including inland waters)	568,000	8.7

indicate that the land presently under agriculture is being put to its optimal use, as is seen in Table 5.

Land classified in this table, as (i) agricultural land, (ii) homestead and (iii) sparsely used cropland are under some form of agriculture. It is apparent that nearly 20 per cent of the land area of the country devoted to some form of agriculture is utilised below optimum levels. These lands are found in all the districts, extents in excess of 100,000 ha. in each district are found in the districts of Anuradhapura, Kurunegala, Ratnapura, Ampara and Moneragala, closely followed by Badulla and Hambantota.

Forest, woodland and scrubland forming nearly 35 per cent of the land area of the country include forest reserves and proposed forest reserves managed by the Forest Department, and national reserves managed by the Department of Wild Life Conservation. While some of these are in upper watersheds of the hill country, the major portion lies in the region classified as the Dry Zone, some of which cover good agricultural land.<sup>15</sup>

The forest cover over the years has been reduced due to the expansion of settlements, some of which have been Government initiated planned schemes while others have been encroachments into state forests, the major portion of which have been regularised by the Government by the issue of permits. It is pertinent to note that 27 per cent of all state land alienations in terms of extents from 1935 upto the end of 1993 have been by way of regularising such encroachments.<sup>17</sup>

In view of the limitations on the availability of land for development, it will not be reasonable to expect an appreciable increase in the area under agriculture.

The above shows that in the past, insufficient attention has been paid to the planning for conservation and development, and that when planning for urban development, there is a need for adopting an integrated planning approach taking into account the need for developing both the urban and rural sectors as an integrated whole. In such an approach, the needs of conservation and development have to be considered together in order to plan for the spatial location of their several activities.

This can be handled successfully, based on suitable land use and land capability studies carried out at different degrees of intensities to enable the planning to be carried out in stages, commencing with national level planning for broad locations and going through the regional and local levels for more detailed locations, ending with the land parcel level of planning and

implementation activity. In such an exercise, it will be prudent in the first instance to identify the areas that need conservation, e.g. the areas needed for the conservation of sources and courses of water required to support life. This will lead to the identification of watersheds which have to be either protected or conserved. The next stage can be the consideration of land capability, leading to the identification of localities for major agricultural and industrial activity, and also to sites that need to be protected or conserved due to existing limitations such as steep slopes and those with a propensity for landslides. On a mosaic of the different activities of this nature, it is possible to identify the locations of human settlements (urban or rural) of different levels of hierarchies together with the routes and modes of communications and transport linking them. The result of such an exercise will be the identification of locations for development as urban centres with different levels of functions and the intervening areas earmarked as 'green' areas devoted to agricultural activities and conservation purposes. In the agricultural areas too, it will be possible to identify locations for housing on a cluster basis, which will permit the economical provision of services.

Thus, for a successful urban development programme, it is necessary to adopt an integrated planning approach, integrating the needs of conservation and development of the entire territory as a composite whole. Such an approach will permit the country to function as an efficient economy while maintaining a healthy urban and rural environment.

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# Sri Lanka : towards Urbanisation in 2015

by Prof. Avelley I. S. Perera  
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The process of urbanisation in Sri Lanka needs to move from a developing country, to being able to make an increasing number of jobs for the majority of the urban sector as the economy has moved to a service dominated level. Further, the increasing dependence on services for urban development is demonstrated in that population could be made to move from the unproductive sector to the productive sector of a service based economy of population in 1985. This is especially so that problems are solved, especially, in the form of a new urban strategy to enhance the structure of Sri Lanka's urban urban population and its growth. A second problem is that of education. The urban population will be made to include the urban sector in the Sri Lanka's urban sector strategy to the extent of urban population in 1985, a strategy of local authorities with a different aim.

The urban population in Sri Lanka is a large one, 2.3 million people, 70% of the total population in 1985. Further, the growth rate of the urban population has increased 1.2% per annum since the period 1971-1981. In the decade between 1981 and 1991, urbanisation has been in the rate of growth of the urban population has moved steadily to about 1.4% per annum, indicating a need for a new urban strategy to meet the needs of the urban population.

However, it is clear that the urban sector is a large one, 2.3 million people, 70% of the total population in 1985. Further, the growth rate of the urban population has increased 1.2% per annum since the period 1971-1981. In the decade between 1981 and 1991, urbanisation has been in the rate of growth of the urban population has moved steadily to about 1.4% per annum, indicating a need for a new urban strategy to meet the needs of the urban population.

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in Sri Lanka. These needs should be met by the state, in order to provide the urban sector with the necessary infrastructure and services. The urban sector will be made to include the urban sector in the Sri Lanka's urban sector strategy to the extent of urban population in 1985, a strategy of local authorities with a different aim.

It will, however, need an extraordinary effort to achieve a number of targets, especially in the urban sector. The urban sector will be made to include the urban sector in the Sri Lanka's urban sector strategy to the extent of urban population in 1985, a strategy of local authorities with a different aim.

It would seem that the urban sector is a large one, 2.3 million people, 70% of the total population in 1985. Further, the growth rate of the urban population has increased 1.2% per annum since the period 1971-1981. In the decade between 1981 and 1991, urbanisation has been in the rate of growth of the urban population has moved steadily to about 1.4% per annum, indicating a need for a new urban strategy to meet the needs of the urban population.

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A regular urban strategy should be developed, including the urban sector in the Sri Lanka's urban sector strategy to the extent of urban population in 1985, a strategy of local authorities with a different aim.

Despite the urbanisation in Sri Lanka, it is clear that the urban sector is a large one, 2.3 million people, 70% of the total population in 1985. Further, the growth rate of the urban population has increased 1.2% per annum since the period 1971-1981. In the decade between 1981 and 1991, urbanisation has been in the rate of growth of the urban population has moved steadily to about 1.4% per annum, indicating a need for a new urban strategy to meet the needs of the urban population.

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# Cities and the New Global Economy

by  
Prof. Willie Mendis

**F**ollowing the Agricultural, Industrial and Information revolutions, a new wave of change comprising the Trade Revolution is currently embracing the world. The latter rests on the principle of free-trade, which nearly all nations have begun to recognise as being a pre-requisite for economic progress. In the latter situation, trade barriers are being modified and tariff structures are being reformed to facilitate the revolution. The consequence has been the emergence of new regimes of trade practices overseen by a newly established global body called the World Trade Organisation (WTO).

Furthermore, a process which began with a different perspective for defence and political alliances has now given way to trade blocs, the more noteworthy being ASEAN, the European Common Market (EU), NAFTA, APEC, and SAPTA. Its further expansion includes the Pacific Rim Market and the Indian Ocean Rim Market. Consequently, it is evident that a new global economy is being fashioned on the basis of creating markets.

This new global economy has been facilitated by the Information Technology Revolution which has made global transactions virtually instantane-

ous and mainly safe and reliable. Its cornerstone has been the speedy diffusion of modern technologies throughout the world.

In these circumstances, two key factors which have a strong bearing on any nation's role-playing in the new global economy are the **creation of markets** and the **diffusion of modern technologies**. These can be supplemented by innovations, the concentration of resources as well as job mobility and skills, to further enhance competitiveness in the global market place.

The characteristics described above are essentially those that can be nurtured in urban environments, especially at the scale of agglomerations. The latter implies that cities have a greater opportunity for development provided they are not monocentric. Consequently, the urban configuration in countries now needs to be judiciously planned, promoted and better managed.

It is however pertinent to note that the new global economy does not demand that nations be totally urbanised. It implies an important share for the rural markets on which the skills and the economies of many countries have survived for centuries. On the other hand, such markets will need to achieve higher productivity, quality assurance, and the maintenance of delivery schedules in order to compete in the global market-place.

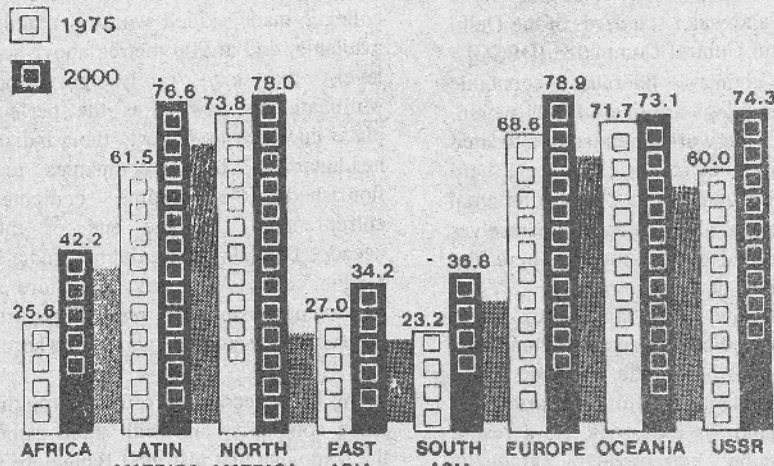
The transformation of a dominant rural-based national economy into an urban-centred global economy will be an extremely challenging task which might not be possible through leap-frogging in the developing countries. Nevertheless, it is also noteworthy that the rural economy cannot accommodate a substantial component of the additions to the labour force if a higher level of productivity is also expected of it. Hence, unplanned city-ward migration will increase if an explicit urban growth policy is not adopted as an integral part of national economic policy. Its negative impact will otherwise result in slum and squatter settlements, degraded environments and low standards of infrastructure services.

On the other hand, if the national economy is firmly locked in with the global market-place, opportunity can be created by attracting private capital flows into direct and portfolio investments. The latter will be influenced by nurturing the previously mentioned characteristics usually found in urban environments. It can include investment flows even into the infrastructure sector.

The City Summit in Istanbul in June 1996 will, hopefully, focus on these issues and provide a framework for a global plan of action in which settlements will become the levers of structural change in the economic planning process. ■

## HALF THE WORLD IN CITIES

By the year 2000 nearly half the world's population will be living in towns and cities. The figures show the percentage of the population living in urban areas.



U R B A N I S A T I O N

# IMPACT OF URBANISATION ON

Urbanisation in India is much less than compared with other parts of the world. For instance, in the Asia Pacific region, the average urbanisation rate is 48 per cent, as against the rate of 32 per cent in India. In 1990, 32.2 per cent of the population in Hong Kong and 38.4 of the population in South Africa lived in cities, while a country having high urbanisation and literacy figures of 70.8 per cent and 74.9 respectively.

Although India has economic development, urbanisation has had many negative environmental effects. It has resulted in congestion, shortage of essential resources. Some government have also the initiatives based on urbanisation. Below have are

## Bangkok

Bangkok's population of 7.4 million is spread across 11 km by the form of an urban. The city is further with a most congested, congestion having reached such proportions that the Thai government is now considering proposals to relocate Bangkok and government agencies in a satellite town to be built north of the centralised urban area. This figure makes that in per cent of the population live in urban agglomerations exceeding 1 million in an urban rate of 2.3 in annual.

Water pollution in Thailand is caused by domestic sewage. Water from Bangkok has been responsible for 15 per cent of the pollution in the Chao Phraya river. Increased water pollution has resulted in water having to be brought at great distances in a great extent. Bangkok plans to divert part of its water. This is rapidly growing by household waste, the level of pollution. Waste has had several treatment and purification plants to mitigate the problem of pollution.

The greatest pollution in most cases is the household level, in which different kinds of air and noise which may affect health. One per cent of the population. The number of them which is increased rapidly due to rising per capita income and the concentration of the urban population. In the case of new cities, all pollution

cannot especially be urbanised. Some have entered in the industries from villages. It is also possible very high. The Bangkok government is building eleven expressways and other highways in order to connect the cities.

## New Delhi

Delivered in the colonial era by uneducated British colonists, Delhi has retained its original form of shape and size and layout, but with the city's growth, surrounding areas have not. One of reasons in 1983, some 77 per cent of the population lived in urban agglomerations of 1 km or more. The standing production of vehicle and small scale industries has led to increasing pollution.

The Central Pollution Control Board (CPCB) estimates that 3,00,000 tonnes of poisonous gas, 100,000 litres of waste water and 100,000 tonnes of products are dumped into New Delhi's environment daily.

Delhi has seen a 100 per cent increase in industries in the past 30 years. Over 18,500 in 1961, in about 19,000 today. Most of these are small-scale industries which manufacture products like tea, chemicals, food and biscuits.

Today, as the city air is struggling with constant power and water shortages, thousands of uneducated factory workers are forced to work in these poisonous areas and die through. These industries emit hazardous and noxious substances which, according to the city's 15-year-old master plan, are prohibited in the central areas. These include the Delhi Pollution Control Committee (DPCC) in the centre. Industrial emissions, noise, traffic are high in per capita. Some of the world's most crowded areas are in slum areas in the city, where there are virtually no environmental regulations. India's central government is already doing more where the authority can't penetrate.

A regulatory model and policy which encourages public sector participation has tried to provide financial incentives and subsidies at affordable prices, at the end for industries. As a result, long-term contracts gradually signed over the years, limited capacity, low-income residential and labour

shortages.

For most of the past three decades, the government has been slow to address pollution problems, and the more. This has led to a situation where it difficult to control emissions such as air pollution, although emissions have been relatively cheap. Pollution to do so is a major problem that will be more expensive to deal with. Although the issue of air quality continues to be a major concern, this seems to be a task which is virtually impossible to address. The DPCC have started to do so in the form of environmental monitoring. Most progress has been made to date, but it is difficult to see how to deal with air pollution, industrial wastes and technology parks.

## Bangalore

Bangalore is now expanding and its size is growing. The city grows too fast, and the government failed to control that fast. In 1980, the city had 1.5 million people, but by 1990, it had 2.5 million. The city is now a major centre of the country, and any future growth would be high. It is now a major centre of the country, and any future growth would be high. It is now a major centre of the country, and any future growth would be high.

This is an extraordinary transformation for a city that just 10 years ago was India's most backward region for business. Today, although only a few companies have actually moved, and several have stopped expanding, their local branches and into looking elsewhere.

In the 1980s, industrial India was assisted by Bangalore's status. Most of the city's growth in the 1980s was in the form of colleges, and other workers hardly available, and in 1980, the city was a level. The city grew too fast, and the government failed to control that fast. In 1980, the city had 1.5 million people, but by 1990, it had 2.5 million. The city is now a major centre of the country, and any future growth would be high. It is now a major centre of the country, and any future growth would be high.

In the 1990s, economic reforms brought more investment and with them came the trapping. This allowed Bangalore to expand in a form of modern urban region with metropolitan areas.

# SELECTED ASIAN MEGACITIES

shopping malls and an unrivalled pub culture. Today however, the city is better known for what it doesn't have. There's a perpetual power crisis and companies must rely on their own generators for electricity. Roads are congested and poorly maintained. Over this chaos looms a water scarcity.

Although these woes afflict all of India's major cities, they are more acute in Bangalore because it has grown faster. The city now has nearly 5 m people, up from 2.9 m in 1981. The boom has overwhelmed city planners. Apart from some half-hearted attempts to develop new suburbs, many of which filled to the brim before adequate civic amenities could be provided, little has been done to accommodate the crush of people and businesses. Slums that sprang up to house migrant construction workers have become permanent.

Bangalore's altitude has also proved a drain on resources. Roughly 10 per cent of its electricity is consumed in pumping water up to the city and even then the demand cannot be met. Daily supply is equivalent to between 90 and 100 litres a person, which is just half the international standard.

Bangalore's once open streets and boulevards are choked with traffic. About 1.6 m vehicles vie for space, an increase of 33 per cent in the past five years. In that time, no significant new roads have been built. Commuting times have doubled. Exhaust fumes from vehicles and diesel generators have helped make Bangalore one of India's most polluted cities. The air is often thick with smog.

To compound its problems, Bangalore's real-estate prices have escalated. Property agents quote Rs 6,500 to 10,000 (US \$ 185 to 285) per sq.ft for prime office space in the city centre, up from Rs 2,500 in 1994 and Rs 1,200 five years ago. Rents are also soaring.

An urban mass-transit system has been envisaged to meet transportation needs, which include the construction of a US \$1.3 bn, 92 km elevated rail network. But each of these projects will take at least three years to complete, even by the most optimistic reckoning.

The federal government shoulders some of the blame for Bangalore's bottlenecks. For example, although its telephone services are inadequate, the

government didn't include the city among the first batch of metropolitan areas - New Delhi, Bombay, Calcutta and Madras to receive cellular telephone networks.

Peak-hour demand for electricity in Karnataka exceeds supply by 17 per cent. Karnataka's generating capacity is 3,500 megawatts. At current growth rates, the state will need 9,000 megawatts in the next four years. Making up the difference will require US \$ 8.6 bn of investment.

The state has presently approved \$ 8.6 bn worth of power projects that will add 6,500 megawatts of capacity. Until these start to come into operation in three year's time, smaller, barge-mounted power plants along the coast have been commissioned.

## Singapore

With a totally urbanised population, this city state is the perfect example of planned development. Planned development is carried out in accordance with the Master Plan prepared by the Planning, Dept. of Singapore.

Three decades of spectacular growth has turned Singapore into the world's ninth wealthiest nation, where the average per capita income is as high as US \$24,000. However, as the city state's standard of living soared, it crashed head-first into rising operating costs, especially in respect of rent and payroll coupled with corresponding congestion-related costs. Escalating domestic rents have even led to some companies relocating overseas, while others have scaled back.

The Singapore government has taken several measures to mitigate the problem. In particular, the government has made several attempts to relocate offices from Singapore's crowded central business districts, where scarcity of office and residential space has led to soaring rents. Office space in the central Raffles Place have about doubled, to S \$10 per sq.ft in late 1995 from S \$5.50 the previous year. However, the government's plan to attract companies away from the central business district has been slow to take off, due perhaps to the fact of the

prestige value of an address in the central business district.

A general limitation has been placed on the number of cars entering Singapore city and an area licensing scheme (ALS) has been introduced as the single important measure to prevent traffic jams and alleviate the additional petrol consumption and pollutant emissions caused by them. The ALS is based on creating a zone, namely, the city's business central district, which gives only limited access to private car traffic. This scheme imposes a fee equivalent to US \$1.25 at the entrance to the business district.

Singapore has one of Asia's most advanced pipe-based waste water systems and is one of the few Asian countries where waste is incinerated.

## Karachi

Alongside weatherbeaten buildings of stone and lime stand primitive shanties of corrugated iron. The streets are riddled with potholes and puddles. People live, trade, cook and sleep on them and use them as latrines. There are no sewers, so stench permeates everything.

There are about 30 murders a day in Karachi. Karachi is plagued by a growing crime rate due mainly to spreading mass poverty and a burgeoning trade in drugs and weapons. At the time of Pakistan's independence in 1947, the capital of Karachi had almost one m inhabitants. Today, between 10 to 15 m people live there.

Karachi's population is growing by about 5 percent a year. So it is no wonder that the once self-contained city of Karachi has long become a conglomerate, an urban sprawl far into its surrounding countryside, with ever-growing suburban communities in which new social forms rise quasi autonomously out of a culture of poverty. They have no electricity, piped water, or sewage system. More than 4 m people now live in the slum suburbs, the *Katchi Abadis* of Karachi, and their numbers are growing by 10 per cent annually, double the rate of the city itself.

RJR

U R B A N I S A T I O N

# Urbanisation and Urban Growth in Sri Lanka

**C**ontemporary scholars of urbanisation and urban development have shifted focus from the tradition of researching monocentric cities and towns, to urban agglomerations. This has been partly fuelled by the increasing reliance of national economies on the global market processes, which require attributes that are usually found in urban agglomerations.

In the Sri Lankan context, the above-mentioned shift in research focus has also been a result of the transformation of the monocentric city from being dominantly a seat of public administration, into a highly competitive economic entity. Consequently, city planning has been overwhelmed and outpaced by growth and rapid change, its immediate pressure being the problems of land supply, spiralling land values, and the overloading of physical infrastructure within the administratively-defined boundaries of the monocentric city.

This situation has caused the lateral expansion of the urban form of the monocentric city into the fringe areas and beyond, creating the conditions for metropolisation. Its further expansion then results from the penetration of the strategic transportation networks to constitute a contiguously identifiable "urban region."

The composition of the spatial organisation of an urban region includes a small share of rural land uses and a polycentric configuration of urban settlements, these being all inter-linked by a web of transport and communication networks. It comprises an appropriate spatial scale for nurturing a modern market-driven urban economy which can be integrated with the process of globalisation.

In the above context, urban planners in Sri Lanka have the dual responsibility of fashioning urban development to dovetail with the attributes required to access the highly competitive global markets and investment flows and at

## Trends and Prospects

by

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the same time, provide for its role in strengthening domestic markets.

In Sri Lanka, urban status is conferred on an area by the Minister in charge of Local Government, purely for local administrative purposes. Such ministerial discretion has usually been based on, "the nature of the development .... (of the locality) .... or its amenities and urban character." Consequently, the areas under the administrative jurisdiction of municipalities, urban councils and town councils were designated as urban.

The above situation changed in 1987 with the repeal of the Town Councils Ordinance and the inclusion of predominantly rural areas under that Ordinance within the newly created *pradeshiya sabhas*. Its impact on the demographic computations of the ur-

ban share of the population has not yet been published, as the census of population which was due in 1991 could not be undertaken due to the on-going conflict in the North and East of the country. On the other hand, the town council areas comprised above 30 per cent of the total urban population during the previous census years. No new town councils were created between 1981 and 1987. Nevertheless, the computation of the total urban population in future years will need to take note of the impact of the exclusion of town councils from the urban sector.

Meanwhile, several areas outside the municipalities and urban councils have also been declared *urban development areas* by the Minister in charge of urban development, under the provision of the Urban Development Au-



tharity Law No. 41 of 1978. In addition, using similar provisions in the Town and Country Planning Ordinance No. 13 of 1946, the Minister has declared areas outside the municipalities and urban councils, 'urban development areas.'

Furthermore, areas have been designated for township development under other statutes which have been enacted for area-wise development, such as those within river basins.

It is also of note that separate statutes enacted to promote industrial development by way of establishing free trade zones, industrial parks and industrial estates, have also indirectly influenced the establishment of urban environments. In a similar manner, the Tourism Development Act has contributed to urban growth in the areas designated as *resort regions* under the Act.

Nevertheless, on the basis of the total estimated population living in the officially defined *urban* areas and in other areas designated for urban development (as described above), the share of the urban population in Sri Lanka has been computed at between 22 per cent and 35 per cent of the total population. It will be reasonable to estimate an urban share of around 30 per cent of the total population using criteria applied in several other countries to define *urban* status. (see Appendix 1).

On the above estimate, the urban population of Sri Lanka in 1984 comprised about 5.1 m persons.

The urban population has been heavily weighted towards the south-western seaboard of the country, centering on the commercial capital city of Colombo. The contiguous urban population in the latter is estimated at 1.5 m persons. (see Map 1). Urban configuration which comprises the southern area is depicted in Map 2.

The growth rate of the urban population in the officially designated urban territories has been slowing in the last inter-censal period (ie. 1971-1981), reflecting a pattern of urban growth at a declining rate. (Table 1). On the other

Appendix I Definition of 'urban' by individual ESCAP countries and areas	
<b>Albania:</b> definition: sixty three localities	<b>Hong Kong:</b> definition: Hong Kong Island, New Kowloon and new towns in New Territories
<b>American Samoa:</b> definition: places of 2,500 or more inhabitants and urbanized areas.	<b>India:</b> definition: towns (places with municipal corporation, municipal area committee, town committee, notified area committee or municipality board); and all places having 5,000 or more inhabitants, a density of not less than 400 persons per square mile or 300 persons per kilometre, pronounced urban characteristics and at least three fourths of the adult male population employed in areas other than agriculture.
<b>Australia:</b> definition: population clusters of 1,000 or more inhabitants; and some areas of lower population (e.g. holiday areas) if they contain 250 or more dwellings of which at least 100 are occupied.	<b>Indonesia:</b> definition: the 1981 census defines an administrative unit as being urban according to the following characteristics: (a) Population density of 5,000 or more per sq. kilometre. (b) Proportion of households in the agricultural sector of 25 per cent or less. (c) Having eight or more urban facilities, e.g. public transport, transportation, theatres, elementary and secondary schools, health centres and assembly centres, covered markets and shopping areas, dormitory or hotels etc.
<b>Bangladesh:</b> definition: places having a municipal corporation, town committee, shahar committee or a government board.	<b>Iran (Islamic Republic of):</b> definition: all <i>shahrestan</i> centres, regardless of size; and all places having municipal centres.
<b>Bhutan:</b> definition: not available	<b>Japan:</b> definition: cities ( <i>Shi</i> ) having 50,000 or more inhabitants with 60 per cent or more of the houses located in the main built-up areas and 60 per cent or more of the population (including dependents engaged in manufacturing, trade or other urban type of business) active fully; a <i>Shi</i> having urban families and conditions as defined by the prefectural order is considered as urban.
<b>Brunei Darussalam:</b> definition: Municipalities and areas having urban socio-economic characteristics.	<b>Laos People's Democratic Republic:</b> definition: sum of two lowest levels of districts, <i>houaphouong</i> , <i>Savannakhet</i> , <i>Khammouan</i> and <i>Paxse</i> .
<b>Cambodia:</b> definition: municipalities of <i>Chhamb</i> , <i>Pent</i> , <i>Bokor</i> and <i>Kap</i> as well as 10 urban centres.	<b>Malaysia:</b> definition: gazetted areas with population of 10,000 or more.
<b>China:</b> definition: urban population referring to population living in areas under the administrative status of towns and townships.	
<b>Cook Islands:</b> definition: not available	
<b>Fiji:</b> definition: not available	
<b>France:</b> definition: communes containing an agglomeration of more than 2,000 inhabitants living in continuous houses or with not more than 200 metres between houses; communes of which the major portion of the population is part of a multi-commune agglomeration of this nature.	
<b>Guam:</b> definition: places of 2,500 or more inhabitants and urbanized areas.	

Source: UN ESCAP Report on the Effects of Urbanization in ESCAP Region, p.1-14.

hand, as previously stated, if there is a shift in the definition of *urban status* the growth rate would change significantly. Thus, if the currently estimated share of 30 per cent of the total population is urban, then the urban growth

rate will be higher than the computed rate of 1.2 per cent per annum.

By city size, only six of the large towns in Sri Lanka had a population of over 100,000 in 1981. The primacy of

the Colombo urban region in relation to the other significant urban regions is shown in Table 2.

In the above context, it is now necessary that Sri Lanka's urban population trends be reviewed in a "policy package" conducive to its contribution to national economic growth. The latter has become particularly imperative, owing to the saturation limits being reached in the agriculture dominated rural sector and its inability to further expand in a manner that would accommodate the needs of employment and the criteria for appropriate levels of economic growth.

The rationale for an explicit urban growth policy requires the comprehension of the urban areas as places of production and marketing (both global and domestic). In the latter context, the following criteria becomes critical for fashioning spatial forms in a creative urban development strategy:

- concentrate resources and create markets
- promote job mobility and a skilled labour force
- support specialisation
- promote more intensive use of modern technologies
- diffuse innovations
- sustain information networks and communications.

The above necessitates the promotion of urban agglomerations. On the other hand, past trends of urban growth indicate that the latter will be possible in Sri Lanka only in certain areas of the country. Other urban areas are likely to continue to grow as monocentric cities.

In the establishment of urban agglomerations to promote the globalisation required for domestic economic growth, the enormous potential of cities to generate a better quality of life for all citizens should be tapped. The latter implies that at a macro level, there would be close integration of urban and rural areas entwined by strategic transport and communication networks. Further, it requires careful management of the economic processes to enable increased involvement of the poor in the mainstream of growth.

In the above context, three types of creative urban agglomerations are appropriate for inclusion in an urban growth policy, namely,

Table 1

Census Year	Urban Population ('000)	Inter-Censal Increase ('000)	Percentage Increase in Urban Population	Average Annual Rate of Growth (per cent)	
				Urban Pop. Only	National Population
1891	321.4				
1901	414.0	82.6	25.7	2.6	-
1911	543.0	129.0	31.2	3.1	-
1921	637.9	94.9	17.5	1.8	-
1946	1023.0	385.1	60.5	2.4	-
1953	1239.1	216.1	21.0	3.0	3.1
1963	2016.3	777.2	62.4	6.2	3.1
1971	2848.1	825.8	41.0	5.1	2.5
1981	3194.9	346.8	12.2	1.2	1.7

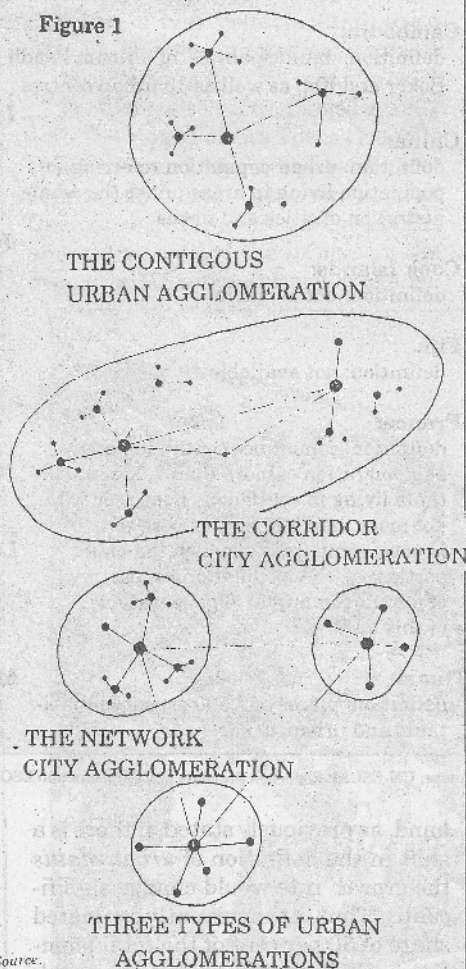
Source: Statistical Abstract of Ceylon - 1977, Census of Population-1971, and Census of Population and Housing-1981, Dept. of Census & Statistics, Colombo.

Table 2

Urban Region	Population (1981) '000
Colombo Urban Region	1825.0
Southern Area Region	281.0
Jaffna Urban Region	244.8
Triple K Triangle Region	83.3
Trincomalee Urban Region	270.6

Sources: Local Government in Sri Lanka, M. W. J. G. Mendis. Urbanisation & Urban Development in Sri Lanka, M. W. J. G. Mendis

Figure 1



Source: Adapted from Report Vol. 1 of Conference on Cities & The New Global Economy, p. 101

- contiguous urban agglomeration
- network cities agglomeration
- corridor cities agglomeration.

Figure 1 depicts the schematic manifestation of these spatial forms.

In the application of the above spatial forms to the Sri Lanka situation, it can be reasonably concluded that the Colombo urban region will comprise the category of contiguous urban agglomeration.

The urban areas in the southern area of the country will comprise the corridor cities agglomeration.

The urban areas in the Kandy - Kurunegala - Kegalle triangle and in the Jaffna peninsula, will comprise network cities agglomeration.

Other urban areas in the country will represent the conventional monocentric cities and towns.

The policy implications of this spatial analysis are to conceive appropriate growth in the prospective urban spatial configurations which will promote the globalisation of the Sri Lankan economy and simultaneously strengthen its domestic markets. This requires compliance with the integration of the following policy ingredients:

- (i) Development of settlements in each urban agglomeration to ensure threshold populations.
- (ii) Creation of strategic transport and communication networks to link the urban agglomerations.

The formulation of a policy towards globalisation of the economy necessarily requires a linkage with an explicit policy on urbanisation and urban growth. A derivative of the latter policy is to establish a track for the appropri-



are share of urban population and to nurture its spatial distribution within the country.

In this approach to an explicit urban growth policy, it is relevant to note the strategies of comparable international competitors. For example, the Philippines would grow from 45 per cent urban (1995) to 60 per cent urban by the year 2000. Indonesia expects to be a 60 per cent urbanised nation by the year 2005. Hence, it would be appropriate for Sri Lanka to provide for a urban share of 50 per cent by 2010. This implies that targeted urban population distribution be envisaged between the agglomerations and the monocentric cities.

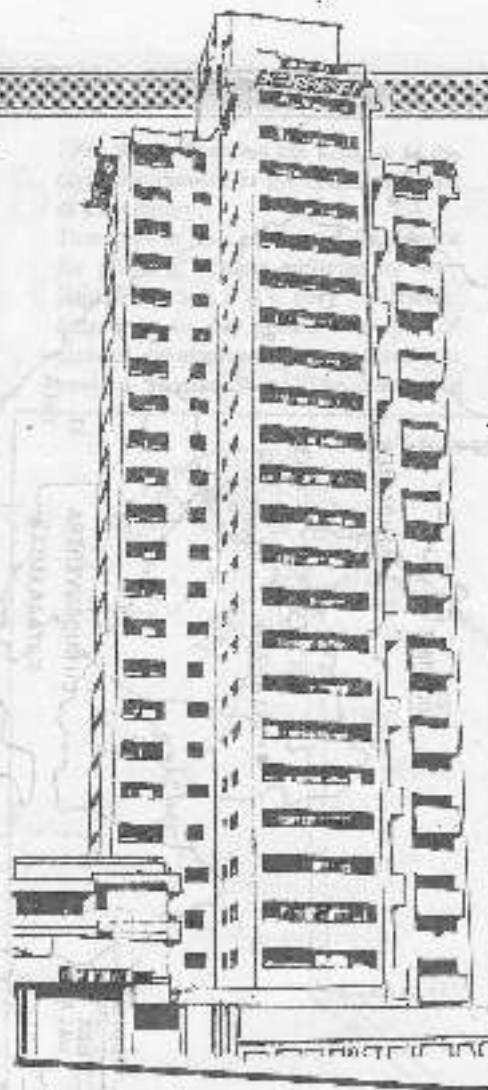
Considering the prevailing demographic pattern and the potential for urban growth in Trincomalee, the establishment of an urban share of 50 per cent by the year 2010 would comprise the following profile:

Colombo contiguous urban agglomeration	- 3.5 m
Southern area corridor cities agglomeration	- 2.0 m
Triple K triangle network cities agglomeration	- 1.0 m
Jaffna urban region network cities agglomeration	- 1.0 m
Trincomalee contiguous urban agglomeration	- 2.0 m
Monocentric town development	- 1.5 m
<b>Total urban population</b>	<b>10.5 m</b>
Percentage share of total population (20.7 m), in 2010	50 per cent

Map 3 depicts the spatial configuration which corresponds to the above distribution of the urban population.

The urban development derivative of this spatial configuration arises from the networking of the agglomeration cities with strategic transport and communication linkages. In this connection, a proposed strategy is incorporated in Map 3.

The pursuance of an explicit urban growth policy aimed at having a 50 per cent urbanised nation requires a major shift in the mindset of the highest planning agency to recognise the importance of globalising the national economy. Fortunately, this process has



been recently encouraged with the invitation extended by the Government to the private sector to invest overseas, and the move to seek the entry of Sri Lanka into APEC in addition to actively pursuing a liberal trade regime under the SAPTA agreement.

In connection with the above, the policy implications of the proposed strategy are to identify the polycentric settlements to be developed in each urban agglomeration and relate their threshold population to modern economic foci such as industrial estates, recreation complexes, services cum trading centres (comprising offices, shops etc), and housing estates. In the latter, private and public investment flows will then have laudatorial direction supplemented by infrastructure development in support.

The probable city-size distribution arising from desired threshold populations being sought in the development of the settlements by the year 2010 would comprise the profile indicated in Table 3. Significant demographic changes to be expected from the proposed urban configuration comprise a two to five-fold increase that

Table 3

City Size Distribution, Sri Lanka in the Year 2010

City Size Distribution (Population)	No. of Cities	
	Year 1982	Year 2010
1 to 1 1/2 Million	NIL	01
1/2 to 1 Million	01	02
1/4 to 1/2 Million	NIL	08
100,000 to 1/4 Million	95	12

would occur in the rate of urban growth in the agglomeration. It is a phenomenon that needs careful management to alleviate the creation of pockets of urban deprivation. Hence, the need for the forward planning of urban settlements and to link them with the economic foci previously mentioned.

Another key issue that would arise in the prospective urban configuration will be the source of the population increase. It is noteworthy that substantial growth will occur in the dry zone agglomerations. Hence, inter provincial shifts in population will take place, especially younger populations who may today be in the age-cohort of below ten years.

The planning of these large urban settlements require close co-ordination of the institutions responsible for infrastructure. The latter implies a major overhaul in the currently compartmentalised form of these agencies into a composite system in which the planning and programming of development will be harmonised on a pre-determined time horizon, whether by using public capital or private capital.

The macro-economic implications and the financial analysis of the prospective urban configuration as prescribed above requires the urban development policy framework to be perceived within a globalised capital structure. Consequently, the policy derivatives needed for the latter have to be fashioned in a manner that investments become attracted into urban areas.

#### Urban - Rural Complementarity

The urbanisation and urban growth discussed in this paper are not exclusive of interdependence with their rural counterpart. The creation of markets with corresponding purchasing power enhances forward and backward

cont'd to page 28

**Galle District**

1. Bentara
2. Elpitva
3. Niyagoran
4. Tavelamala
5. Nelawa
6. Nugoda
7. Karcodeniya
8. Ambalangoda
9. Bulapitiya
10. Hikkadawa
11. Paddegama
12. Yakkaalamulla
13. Alameerama
14. Bape - Peditala
15. Galle
16. Habaraduwa

**Matara District**

17. Kotapola
18. Pasgoda
19. Malaliy-908
20. Alameyasa
21. Malumboda
22. Kamburupitiya
23. Hakkara
24. Dikwells
25. Teahagula
26. Weligama
27. Matara
28. Devanuwara
29. Pitaboddara
30. Welipitiya

**Hambantota District**

31. Weeraketiya
32. Anuradakola-pellewa
33. Ambalantota
34. Hambantota
35. Sooriyawewa
36. Lunuwana-welera
37. Passamaharama
38. Tangalle
39. Belialla
40. Oherwala
41. Kularwewa

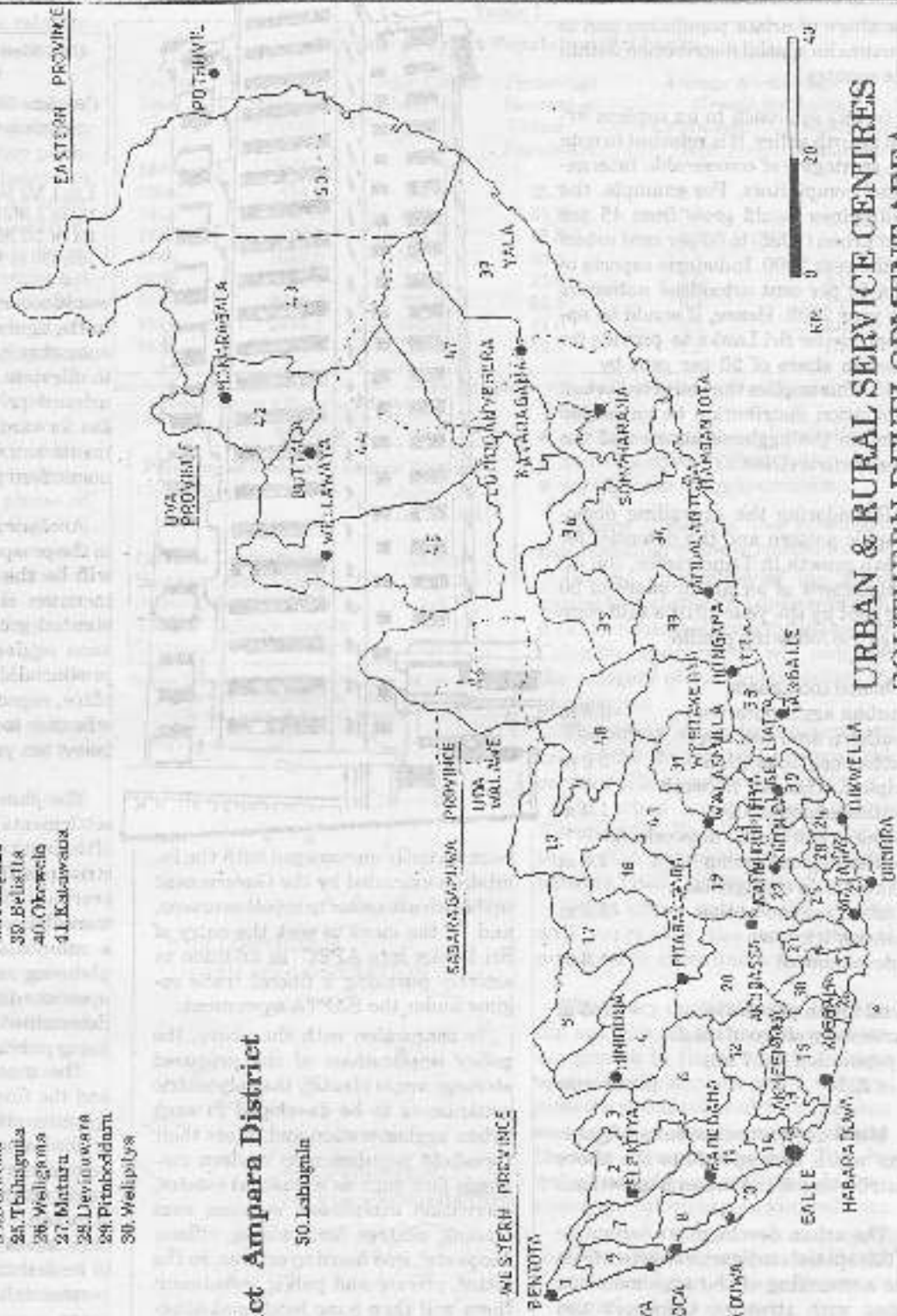
**Monaragala District**

42. Mousarawala
43. Sivambalindirwa
44. Bullala
45. Welinawa
46. Tuoramawala
47. Kataragama

**Ratnapura District Ampara District**

48. Eralpitiya
49. Kakkama
50. Labugaha

Map 2



URBAN & RURAL SERVICE CENTRES  
SOUTHERN DEVELOPMENT AREA

**con't from page 13**

With the structural changes of the economy, there has to be a physical concentration of activities based on urban areas. That is what we are presently experiencing. Therefore, I don't think we have a situation of a very high concentration of population in the metropolitan city as in some countries. Take the population of Colombo. The growth of Colombo is negative because there is hardly any land, Colombo is already developed, but the metropolitan region of Colombo is growing, which is reflected in the conversion of agricultural lands for commercial and industrial activities. The move towards industrialisation invariably leads to more urban development, which may not be reflected clearly because of the lack of redefinition of our geographical areas for the last so many years.

Ascertaining exact population figures poses a problem, though. Despite the fact that Sri Lanka has been experiencing a fairly high rate of urbanisation, this is not reflected in our statistics very much, because we still go by the urban areas defined thirty to forty years ago, viz. - the boundaries of the present Urban Councils, Municipal Councils and former Town Councils. So only populations within those areas are defined as urban populations, whereas in actual fact, urbanisation has expanded beyond those boundaries and new urban areas have come into existence since. When taking into account the densities of population, economic activities etc., we have to categorise these areas as urban although they are still, legally, considered rural areas. Recategorising the spread of new populations can be achieved only by redefining the geographical areas.

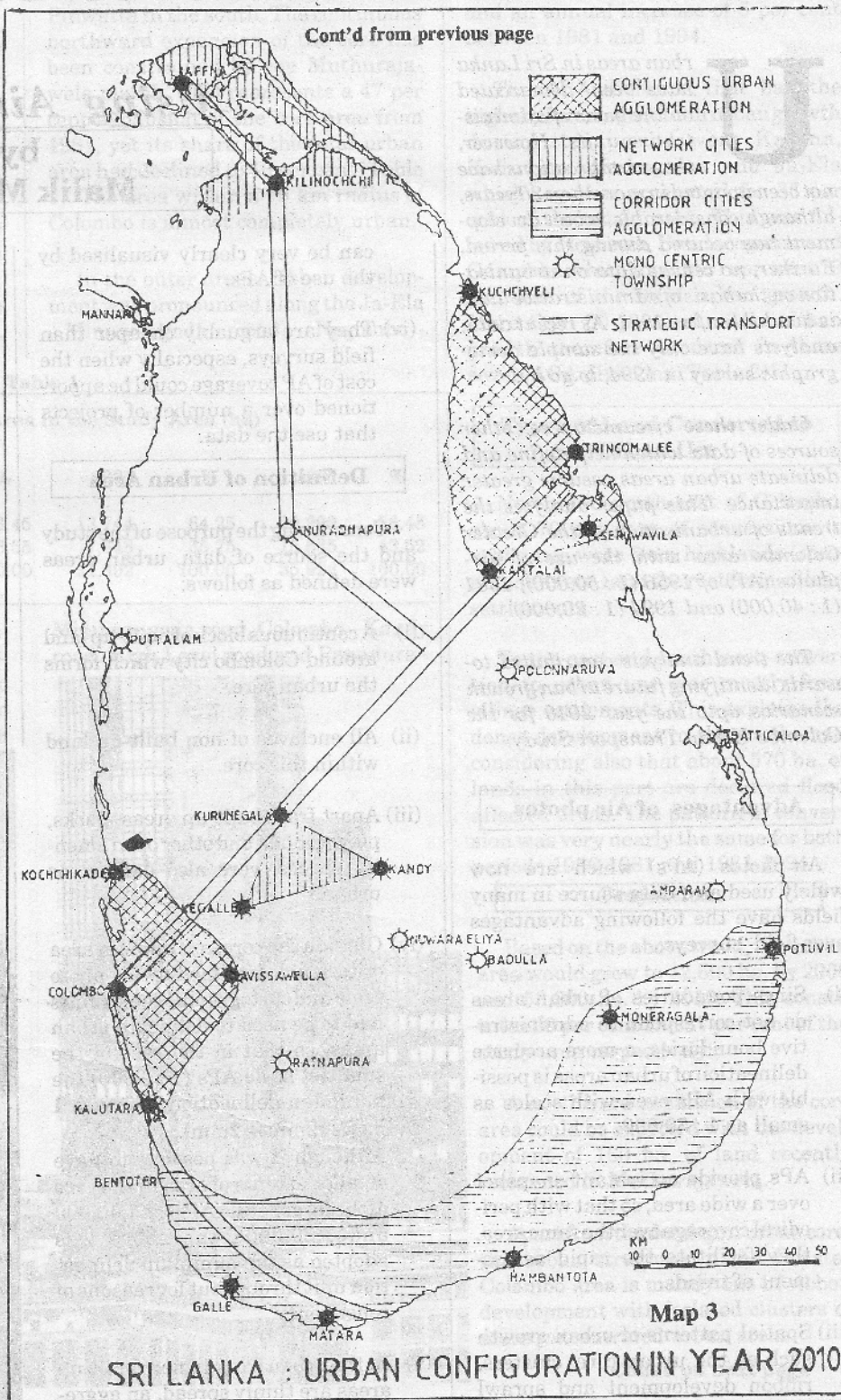
The smallest geographical area for the purpose of census has to be the *gramaseva niladari* unit. However, presently the smallest area that has been considered for the census of population is the AGA division, that is, the Divisional Secretary's area, which is not small enough to redefine the urban areas. So, it is necessary to update the urban data by making use of the smallest geographical area, that is, the Grama Seva Unit. According to statistics from the 1981 census, our urban population is about 21 per cent, whereas the actual urban population is over 35 per cent. Although a census of population is conducted every ten years, the last census scheduled for

1991 was not carried out because of the civil disturbances in the North and East of the country.

There has to be a basic legal framework for planning. Unless enforced by law, implementation is very difficult. Singapore is the perfect example of planned development because there you have a Master Plan. The Singapore

Redevelopment Authority is a government agency for promoting urban development. They have to abide by the Master Plan prepared by the Planning Department of Singapore. This is strictly enforced, which is why you get balanced and planned development.

RJR



# Urbanisation Trend in the Greater Colombo Area from 1956 to 1994

**U**rban areas in Sri Lanka have been demarcated on the basis of administrative units. However, these demarcations have not been updated in more than 20 years, although considerable urban development has occurred during this period. Further, no census data on urbanisation on the basis of administrative units is available after 1981. As recent data analysis has only the sample demographic survey in 1994, to go by.

Under these circumstances, other sources of data which help define and delineate urban areas assume greater importance. This paper analyses the trends of urbanisation in the Greater Colombo area with the use of air photos (APs) of 1956 (1:50,000), 1961 (1:40,000) and 1994 (1:20,000).

The trend analysis contributed in words identifying future urban growth scenarios upto the year 2010 for the Colombo Urban Transport Study.

## Advantages of Air photos

Air photos (APs) which are now widely used as a data source in many fields have the following advantages over field surveys:

- (i) Since boundaries of urban areas do not correspond to administrative boundaries, a more accurate definition of urban areas is possible with APs even with scales as small as 1:50,000.
- (ii) APs provide an instant snapshot over a wide area, so that with periodic coverage over the same area, they facilitate the rapid assessment of trends.
- (iii) Spatial patterns of urban growth such as the urban core, clusters, ribbon development and sprawl

## Using Air Photos

by  
**Malik Majeed**

can be very clearly visualized by the use of APs.

- (iv) They are arguably cheaper than field surveys, especially when the cost of AP coverage could be apportioned over a number of projects that use the data.

### Definition of Urban Area

Considering the purpose of the study and the source of data, urban areas were defined as follows:

- (i) A continuous block of built-up land around Colombo city which forms the urban core.
- (ii) All enclaves of non built-up land within this core.
- (iii) Apart from built-up areas, parks, playgrounds and other open amenity spaces were also defined as urban.
- (iv) Outside the core, a minimum area criterion determined by air photo scale and cartographic constraints had to be used to delineate urban areas, so that in the case of the smallest scale APs (1:50,000) the minimum delineation unit was 1 ha (ie. 2mm x 2mm). Although it was possible to have smaller extents of area in the case of the larger scale APs (ie. 1:40,000 and 1:20,000), the above was adopted as the minimum delineation unit throughout for reasons of consistency.
- (v) At the urban fringe where built-up areas are thinly spread, an aggre-

gation criterion was used which related the length of the buildings with the perpendicular distance separating them. Any area that was equal to or greater than the minimum delineation unit on the basis of such aggregation of built-up areas was defined as urban.

### Urban Area in 1956

The urban area in 1956 included Colombo city, Nugegoda, the Dehiwela/Mt. Lavinia municipal council areas excluding Attidiya, and parts of the Maratana urban council area. In addition, there were mainly the satellite towns of Negombo, Gampaha, Ragama, Panadura and Kalutara.



The urban area added up to 7,200 ha in 1956 and comprised 5 per cent of the study area which covered a major part of the Western Province. The urban core (ie. block of continuous built-up area) made up 75 per cent of the urban area reflecting the urban concentration around Colombo (Table 1).

#### Urbanisation from 1956 - 1981

During this period, the urban core area expanded upto Kerawalapitiya (2.5 km north of Wattala) in the north, Kotikawatte in the east, Navinna in the south-east and Egoda Uyana (2.5 km north of Panadura) in the south (Map 1). The core area had grown by 160 per cent. However, the percentage of the core area in relation to the total urban area had declined to 64 per cent, reflecting a greater increase in the peripheral areas (Table 1).

Nugegoda and Kaduwela followed with 20 per cent of the total urban growth (Table 2).

#### Urbanisation from 1981 to 1994

During this period the core area had expanded upto Hokandara in the east, beyond Kesbewa in the south-east and Pinwatta in the south. The continuous northward expansion of the core has been constrained by the Muthurajawela marsh. This represents a 47 per cent expansion of the core area from 1981, yet its share of the total urban area had declined to 56 per cent (Table 1). The area within a 10 km radius of Colombo is almost completely urban.

In the outer areas, ribbon development was pronounced along the Ja-Ela - Minuwangoda road, Negombo -

Horana road. Further, there was urban expansion around Gampaha town, around the airport at Katunayake, and around Kalutara town.

During the thirteen years upto 1994, the urban area had increased to 35,900 ha., comprising 25 per cent of the study area. This represented an increase of 68 per cent over 1981 figures and an annual increase of 5 per cent between 1981 and 1994.

The AGA divisions that had the higher percentage of total urban growth during this period were Katana, Kaduwela, Homagama and Ja-Ela which together accounted for 38 per cent of the urban area. This was followed by Kesbewa, Bandaragama and Gampaha which together represent 19 per cent of the total urban growth. More than 50 per cent of the urban growth therefore occurred in these seven AGA divisions (Table 2).

Table 1

Urban Area (ha.)	1956	%	1981	%	1994	%
Core Area	5,288	73.45	13,744	64.25	20,293	56.48
Peripheral Areas	1,911	26.55	7,648	35.75	15,635	43.52
Total	7,199	100.00	21,392	100.00	35,928	100.00

#### Types of Land Converted to Urban Use

North and north-east of Colombo, about 70 per cent of conversions to urban use were from highlands (coco-nut lands etc.) and the rest from village settlements.

To the east and south-east, conversion to urban use was mostly from village settlements. This explains the dense development in the south-east, considering also that about 570 ha. of lands in this part are declared flood affected areas. The pattern of conversion was very nearly the same for both periods 1956-1981 and 1981-1994.

#### Projections

Based on the above trend, the urban area would grow to 42,600 ha. by 2000 and 53,800 ha. by 2010. This constitutes 30 per cent and 37 per cent of the study area respectively.

A northward expansion of the core area could be expected with the development of 160 ha. of land recently reclaimed in Muthurajawela.

Apart from the dominant urban core, the urban structure in the Greater Colombo area is mainly one of ribbon development with isolated clusters of more concentrated urban areas.

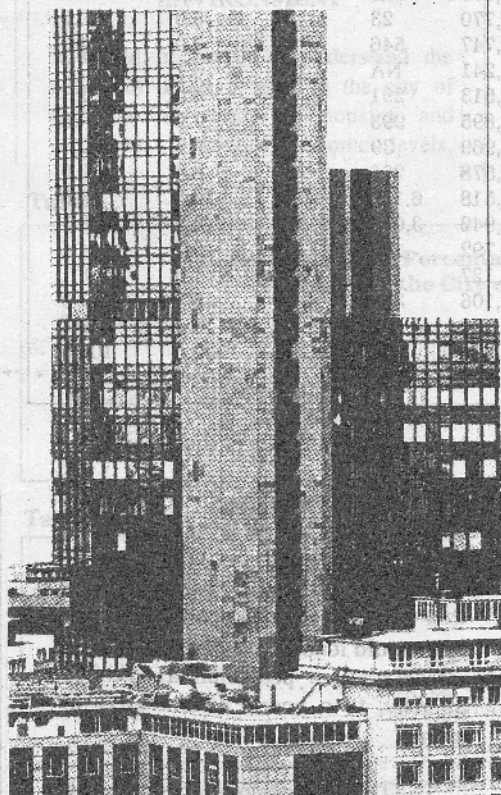
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This increase was the result of ribbon development along the Colombo-Katunayake road from Welisara to Ja-Ela and again from Seeduwa to Negombo and along Galle road from Kudawaskaduwa to Katukurunda. There was growth around Kalutara town as well. In areas east and south-east of Colombo, there was considerable ribbon development along secondary roads too.

In extent, the total urban area had grown to 21,400 ha, covering 15 per cent of the study area. This represented a 200 per cent increase over the past 25 years, or an annual increase of 8 per cent.

By overlaying the boundaries of Assistant Government Agent (AGA) divisions on the map of urbanisation, it was possible to analyse trends in terms of administrative units. The AGA divisions with the higher percentage of the total urban growth during this period were Kesbewa, Negombo, Panadura, Maharagama and Kolonnawa, which together experienced 43 per cent of the total urban growth. Moratuwa,

Minuwangoda road, Colombo - Kandy road, High Level road and Panadura -



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linkages between the urban and rural economies. Furthermore, the globalisation of the rural economy via urban services will infuse technological change in the rural sector. Consequently, greater capital flows will take place in the latter, reinforcing the potential for higher incomes and improving the quality of life in rural settlements.

The rural sector will also provide the "food basket" consumed in the urban sector, which will also lead to developing the food processing industry.

The urban - rural complementarity will therefore be an integral part of the overall human settlement strategy. The latter will include policy measures for

environmental and natural resources management, especially in the rural areas.

Further research in this sphere of urbanisation and urban growth in the globalising processes needs to be pursued especially by multidisciplinary teams. In particular, much information is needed on the situation of unplanned urban growth caused by the inability of the rural sector to create new growth. □

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Table 2

#### Land Use Change in the Study Area, 1956-1994 (Hectares)

Division	Area		% Increase		% of Total Increase		
	1956	1991	1956-81	1981-91	1956-81	1981-91	
Negombo	256	1,439	1,978	509	27	8.8	3.7
Kalana	398	813	2,520	129	176	3.6	11.1
Veyangoda	0	169	402	NA	198	1.2	1.6
Gampaha	200	552	1,417	28	344	0.4	8.0
Jakkla	263	966	1,782	110	215	2.1	8.4
Warakala	97	662	1,026	873	88	3.9	2.6
Kelaniya	69	898	1,322	770	104	3.7	4.3
Mahaara	0	109	905	NA	469	1.1	5.1
Biyagama	0	905	1,008	NA	393	1.4	5.6
Colombo	8,028	8,742	3,770	23	1	5.0	0.2
Kalawana	181	1,170	1,747	548	49	7.0	4.0
Kaduwa	0	559	2,241	NA	181	6.1	9.6
Nuggeoda	379	1,247	1,514	291	21	6.7	1.8
Maharagama	113	1,230	1,895	895	54	7.9	4.6
Dalwela/Ratana	1,348	1,963	1,963	20	6	8.7	0.7
Marawala	473	1,444	1,573	206	9	6.8	0.9
Kesara/Wijayawala	25	1,359	2,513	6,137	61	10.8	3.6
Hemasgama	20	892	1,942	3,013	212	4.2	3.1
Hemas	60	147	792	194	439	0.7	4.4
Bandara	0	233	1,137	NA	384	1.8	8.1
Kalutara	194	966	1,106	383	16	6.3	1.0
Ududura	172	1,370	1,772	899	29	8.4	2.8
Total Urban	7,199	21,392	36,929	197	68	100.0	100.0
% Study Area	5	15	25				

The pattern of urbanisation since 1956 was influenced mainly by the small scale infilling of rural areas and the intensification and extension of ribbon development along main and secondary roads.

The rate of expansion of the urban area averaged about 5 per cent annually since 1956.

The process of infilling and intensification is greater in a south-easterly direction, while there is greater south-

ter in a north-easterly direction.

In the absence of major urban development projects and greater planning intervention which optimise land use and create strategic growth centres, this trend in the pattern of urbanisation would lead to greater problems of infrastructure provision and consequently, to a poorer urban environment.

The Urban Development Authority

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has identified Kesbewa, Athurugiriya, Mulleriyawa and Kolu as growth centres for which plans are being prepared on a priority basis. If implemented, this would improve the urban structure, provided there are better transport linkages as well.

It is evident from the map that higher urban growth was recorded in the ACA divisions nearer Colombo during the period 1956 and 1981, and in ACA divisions further away, between 1981 and 1994, with the exception of Negombo and Panadura which are older satellite towns. The towns to the north-east, such as Ringana, Gampaha and Veyangoda too need to be developed on a priority basis, considering the present scattered development and the attendant problems. In the absence of such a strategy, the tendency for urban sprawl would be greater to the north-east, where most of the lands are highlands.

The map titled 'Urbanisation Trend in Study Area' could not be reproduced in this issue due to space constraints. It is, however, available with the author at the National Building Research Organisation.

#### About the Writer

Dr. Madis Rajand is a senior research officer at the National Building Research Organisation. This study was undertaken in his capacity as urban planner for the Colombo Urban Transport Study (1996) carried out by Halcrow Fox Ltd., UK in association with Engineering Consultants Ltd., of Colombo.

# Alleviating the Conditions of the Urban Poor

## Action Programmes and Policies by M.A.P. Senanayake

The globe is rapidly transforming into an urban world in search of solutions for ever-growing human needs. The UNCHS, in its interim draft report of the Global Plan of Action (to be adopted at the Habitat II Conference in June 1996) makes the following statement:

*"The rapid growth of cities, the concentration of urban population in larger cities, and accelerated growth of mega-cities are the most significant transformation of human settlements. By the year 2000, more than half of the world's population will live in cities, and much of the remaining population will depend on cities for their economic and social well-being. Among the economic and social factors influencing this process are demographic growth and migration, real and perceived employment opportunities, cultural expectations, changing consumption and production patterns and serious imbalances among regions". (para 105 - 31 July 1995)*

Over the past two decades, the world population has increased from about 4.2 bn to about 5.7 bn and people have increasingly come to live in cities. Meeting the aspirations of an expected population of nearly two bn more people in the coming two decades will be a daunting task especially in urban conglomerates.

By the year 2000, the world population will be about 6 bn, and by 2015 it will reach a level of around 7.7 bn. At present, more than a billion people, both in urban and rural societies, are living in poverty, without even adequate shelter, in bad settlement environments and under deteriorating health and sanitary conditions. The majority of them live in urban agglomerations of developing countries. By the year 2000, more than half the world's population will concentrate in cities and hence, urban poverty can become much more serious if adequate mitigatory measures are not taken in advance.

The case of Sri Lanka in the global context, and especially as a nation among

developing countries, has been an exception in terms of its urban magnitude and slow process of urbanisation. In 1981, it had an urban population quantum of 3.19 m which constituted only 21.4 per cent of the total national population. This population lived in 134 towns including 12 municipal councils and 39 urban councils. The estimated present urban population out of the national population is about 28 per cent living in the Greater Colombo urban agglomerations, district capitals, and in about 300 expanding small towns and rural centres situated in the 293 *pradeshiya sabha* divisions. There are no reliable statistics available on socio-economic characteristics focussed on urban poverty other than for the Colombo Municipal Council (CMC) area which is considered as being the only city having a population of 6.35 m. The empirical data of several surveys and many case studies enable us to characterise urban poverty in the CMC area.

### HOUSING AND SETTLEMENT ENVIRONMENT

It would be useful to understand the nature of urban poverty in the city of Colombo in terms of housing and settlement conditions, income levels,

expenditure pattern and the type of employment etc. to perceive the possible characteristics of future urban poverty in the national context of Sri Lanka.

The type of houses and their structural conditions together with the micro settlement environments in which the poor live are manifestations of their socio economic profile and living conditions, as can be observed in Table 1.

The estimated population in the city of Colombo in 1973 was 611,000 and therefore the slum and shanty dweller figure of 350,953 formed 57 per cent of the total population.

In 1994, the total population of the CMC was 635,459 and the total housing stock was 106,415 units. Table 2 indicates that even after the implementation of several housing and settlement programmes, 43 per cent of the CMC population still lives in slum and shanty settlements. Further, the slum and shanty housing units form 36.77 per cent out of the total housing stock of the city. These slum and shanty structures are devoid of essential housing amenities such as water supply, lighting and toilet facilities. As a result, neighbourhoods became insanitary and therefore the occupants are prone to frequent illnesses and disease.

The situation of the shanties is much more serious in terms of their location on

Table 1

Types, Number and Percentage of Squatter and Slum Dwellers in the City of Colombo - 1973			
Type of Houses	Number	Occupancy Rate	Est. Population
Tenement Slums	19,576	6.99	136,836
Old Houses	8,172	7.02	57,367
Shanties	25,000	6.27	156,750
Total	52,748	-	350,953

Table 2

source: Housing in Sri Lanka, Marga Research Studies-6, 1976 p80

Types of Houses and Population 1995			
Type of Settlement	Number	Occupancy Rate	Population
Slums	20,597	7	144,179
Shanties	18,538	7	129,766
Total	39,135	-	273,945

Sources: I. 1994 Demographic Survey conducted by the Department of Census and Statistics.  
II. Housing for Low income City Dwellers - case study in the Hunupitiya ward of the CMC Dept. of Town and Country Planning of the University of Moratuwa, 1995 p. 28.

canal banks, road reservations, low-lying areas and flood-prone stretches as well as the unavailability of amenities and the structural conditions of the houses themselves. Most of them are either semi-permanent or improvised structures as indicated in Table 3:

Table 3

Structural Conditions of Slums and Shanties 1995		
Structure	Slum	Shanties
Permanent	58.2	1.0
Semi-permanent	10.6	26.0
Improvised	1.2	52.9
Total	100	100

Source: Housing for Low Income City Dwellers - Case Study in Hummelton Ward of the CMC - Dept. of Town and Country Planning, University of Mauritius 1996 p. 89 and 102.

The majority of the urban poor in the CMC area, as already pointed out, were either in slums or shanties, with the exception of relatively marginal numbers of street children and beggars who stay the night at public places such as railway stations, bus stations, bus halts, under bridges etc. Therefore, the household income levels of slums and shanties form acceptable indicators that depict the general income profile of the urban poor.

Table 4

Classification of Households by Income Levels 1995		
Monthly Income	Slum Household %	Shanty Household %
<3,499	64	65
3,500-4,999	14	18
5,000-5,499	13	24
5,500-6,489	05	04
6,500 <	14	09
Totals	100	100

Source: Housing for Low Income City Dwellers - Case Study in Hummelton Ward of the CMC - Dept. of Town and Country Planning, University of Mauritius 1996 p. 117.

It has been established that the incomes of slums are slightly higher than that of shanties, and it is notable that in both cases, cash incomes are obviously much higher than in the poor rural and plantation sectors of the island.

### Expenditure Patterns

Even if the cash incomes of the urban poor are relatively higher, with no other material income and due to the increasing cost of living in the city, they lead a miserable life through a constant struggle to acquire day-to-day basic human needs such as food, power and energy, education, clothing, shelter etc.

Table 5

Household Expenditure per month by Items 1995		
Items	Slums %	Shanties %
Food	73	80
Power and energy	26	24
Education	06	05
Clothing	05	04
House rent	24	01
Transport	03	01
Health	02	01
Support to dependents	01	01
Water	01	00
Other (entertainment, savings & emergency requirements etc.)	02	03
Total	100	100

Source: Housing for Low Income City Dwellers, University of Mauritius, 1995, p. 114.

Table 5 reveals that the bulk of income is spent on food and very basic items, which characterises a real subsistence economy with marginal expenses on entertainments, savings and emergency requirements etc.

### Employment Structure

The low income population, in other words, the poor and the ultra poor are both mostly employed in the informal sector, which are integral and essential components of the city's economy. Therefore, this category renders a great service to the socio-economic and cultural life of the city.

Table 6

Employment by Category		
Category	Slums %	Shanties %
Labourers (CMC, Dept. of Health, Construction Sites, Maritime Log Porters)	15	39
Factory workers	17	27
Salesman and Vendors	21	19
Service Sector (tailors, drivers, cobblers etc.)	31	04
Foreign Employment (Middle East house maids and labourers etc.)	09	07
Manufacturing sector	07	03
Mobile cooks and artists etc.	0	02
Total	100	100

Source: Housing for Low Income City Dwellers - Case Study in Hummelton Ward of the CMC - Dept. of Town & Country Planning, University of Mauritius 1996 p. 120.

Brokering, pick pocketing, salvaging and re-using items out of garbage mounds as well as *kenna* growing are some of the income activities not mentioned in the above table. It is obvious that those in the higher income brackets do not perform this type of activity even if they are part of the urban machinery.

The very nature of the informal sector employment activities that they perform determine the status of their employment, resulting in most of them being employed on a casual or temporary basis.

Table 7

Employment Status		
Status	Slums %	Shanties %
Permanent	20	23
Casual	80	73
Temporary	30	01
Total	100	100

Source: Housing for Low Income City Dwellers - Case Study in Hummelton Ward of the CMC - Dept. of Town and Country Planning, University of Mauritius 1995.

Casual and temporary employment in slums and shanties form very high proportions of 80 per cent and 77 per cent respectively as indicated in Table 7.

The other salient feature of their

employment profile is the fact that most of them are employed in the private sector or self-employed.

Table 8

Employment Sectors 1996		
Sector	Slums %	Shanties %
Public	18	38
Private	82	39
Self-employment	30	21
Total	100	100

Source: Housing for Low Income City Dwellers - Case Study in Hummelton Ward of the CMC - Dept. of Town & Country Planning University of Mauritius - 1996 p. 126.



According to this case study, 82 per cent and 62 per cent of slum and shanty work forces respectively, are employed in the private sector or are self-employed. This may be due to their low level of education and skills which prevent their absorption into public sector cadres.

### Magnitude of Urban Poverty

The greatest concentration of urban population in Sri Lanka is found in the Colombo urban agglomeration including the Colombo, Dehiwala and Mt. Lavinia municipalities and the Peliyagoda, Kolonnawa, Kotte and Moratuwa urban council areas. The intense urban character of this coniguous and polycentric urban area cannot be compared with the other monocentric urban centres in the island. Therefore, the highest concentration and proportions of urban poor are also found in this zone.

It is estimated that the urban poor in the CMC area alone form about 45 per cent of the total city population including slum and shanty dwellers, street children, beggars and other destitutes. Further, it is roughly estimated that one-third of the population in the Greater Colombo urban agglomeration, which extends to

Koelichikade to the North, Avissawella to the East and Piraduru to the South, contains a population of approx. 2.5 m; the estimated urban poor is therefore around .85 m. Secondly, the major monocentric urban centres which are district capitals such as Jaffna, Kandy, Galle, Matara, Badulla, Nuwara Eliya, Ratnapura and Amarapura, together with about 300 small towns including rural centres, carries around .5 m urban poor (see Table 9).

Table 9.

Estimated Urban Population and the Urban Poor				
Year	Total Population (millions)	% of urban Population	Quantum of Urban Population (millions)	Urban Poor 25% of Urban Population (millions)
1981	17.04	21.58	3.7	.90
1986	18.44	23.62	4.34	.97
1991	19.77	29.75	4.55	1.14
1998	21.98	27.68	5.27	1.32
2001	20.00	30.00	6.00	1.50

Source: Estimated on the basis of UNFPA estimates as published in the years 1986, 1991, 1996 and UNICEF.

It is assumed that by the year 2001, the urban poor would reach a minimum of 1.5 m, which is equivalent to 7.5 per cent of the total population nation-wide. However, with the saturation of the

absorption capacity of labour into the rural and plantation economies, migration into urban areas in search of employment and better facilities can substantially increase, which in turn tends to increase the quantum of urban poor even upto about 2 m, equivalent to 10 per cent of the estimated total national population by 2001. Also, it is anticipated that by the year 2015, the urban population of Sri Lanka would reach 45 to 50 per cent and as a result, urban poverty can worsen the quality of life and urban environments if appropriate measures are not adopted in advance.

### ACTION PROGRAMMES APPLICABLE TO POVERTY

Some national level action programmes of relevance as well as other programmes directly focused to the urban poor would be briefly reviewed in this section.

#### (1) Free Ration System, Coupon Book

This national level system implemented by the Food Controller in the urban, rural and plantation sectors through the co-operative outlets was operational from the time of the Second World War upto 1979. It was legislated under Food Control Act No. 25 of 1952. All the families in the island were eligible for ration coupons under this subsidy programme, the objective of which was only to grant free food rations and control the issue of essential items like kerosene oil and clothes etc. in times of shortage. But its developmental vision was built into the programme and it created an ever growing heavy expenditure in the national budget.

#### (2) Food Stamp System

This was the second ration system introduced in 1979 and it was expected to reduce the number of beneficiary families after a re-assessment of income levels of

the former free ration beneficiaries. The Controller of Food continued the implementation upto 1985, and with the introduction of the Poor Relief Act No. 72 of 1985, the responsibility came under the Poor Relief Commissioner. This system catered to 1.4 m (a population of 5,423,505) families that formed 30 per cent of the national population in 1994 and the same question regarding the heavy public expenditure to maintain the system arose. The total expenditure in 1994 was 5,105 m for food stamps and kerosene oil. The programme is yet being implemented in the Northern and Eastern provinces for 324,980 families which constitute a population of 1,349,109.

The maximum family income level to become eligible for food stamps was Rs 300 in 1979 and this was raised to Rs 700 in 1986. The programme was implemented in the urban, rural and plantation sectors but it also lacked developmental objectives in the former ration coupon system.

#### (3) Inamaviya Programme

This national level programme had a broader scope than that of a mere subsidy distribution system. Actually, this was the first programme which combined low-income public assistance with development, promoting individual and community projects, raising public awareness, enhancing self reliance, mobilising savings, providing credit facilities, creating opportunities for capital formation by the poor and selecting needy families through a participatory and transparent process for Inamaviya assistance. It was expected to cover the whole island over 10 cycles of implementation. However, only 5 cycles were implemented from 1989 to 1995, with a coverage of only 125 Divisional Secretary's divisions as indicated in Table 10. From 1983 the Inamaviya Programme was implemented parallel to the Food Stamps Programme and the Food Stamps Programme ceased to operate in the Inamaviya Divisions.

These amounts were spent on an 'consumption package' at the rate of Rs 1,158 per family per month during 24 months over every round of implementation. The target was to extend the assistance to 1.4 m poor families over 10 cycles of implementation.

The relevance of this programme to the

**Table 10**

**Janasaviya Programme from 1989 to 1995**

Cycles	Number of D. S. Divisions	Number of families	Amt. spent (Mn) (1458/- per family)
1	29	151,704	5,308,426
2	22	98,800	3,447,210
3	23	103,812	3,518,934
4	25	94,183	2,645,815
5	26	120,000	2,274,480
Total	125	568,499	17,194,865

Source: Unpublished data of the Janasaviya Commissioner's Office.

urban context was very marginal. It was implemented only in two Urban Local Authority areas and some suburban divisions - namely Jaffna MC, Kolonnawa UC and Biyagama, Homagama, Minuwangoda, Hanwella and Pradeshiya Sabha areas.

**4. Samurdhi Programme**

The Janasaviya Programme replaced by the Samurdhi Programme in August 1994, and is a national level programme applicable all - island simultaneously in the urban, rural and plantation sectors. At present, it is operational in 245 Divisional Secretary's divisions with the exception of only 48 such divisions in 7 districts in the North and East due to the prevailing civil conflicts. By November 1995, the programme had reached 1,351,288 families and the number of families to be brought under the programme in the North and East is estimated at 324,980. This gives a national total of 1,676,268 families, which accounts for 46.56 per cent of the present national population. The total expenditure for cash grants (Samurdhi stamps) of different slabs (Rs 100, 200, 500 & 1000) for the month of November 1995 was 533.47 m. The national average benefit per beneficiary family in November 1995 was Rs 395 per month.

This programme is highly relevant to all urban and suburban poor, but the impact should not only be measured on the basis of cash to families, neglecting the social mobilisation and developmental aspects. Like the Janasaviya, this programme also has a broader vision towards social mobilisation, making the poor the real partners of production and incorporating them into the mainstream of the economy.

**5. Urban Low Income Housing Programme**

Several urban low income housing programmes were implemented from 1978 upto now, and can be summarised as follows:

**Table 11**

**Urban Low Income Housing Programmes: 1978 - 1996**

Programme	Period	Families Reached
Hundred Thousand Houses Programme: Slum and Shanty Improvement Project	1978-1983	15,000
Million Houses Programme: Urban Housing Sub-Programme	1984-1989	87,494
1.5 Million Houses Programme - Urban Housing Sub-Programme	1990-1994	28,976
Urban Housing Development Programme	1995 to date	2,053
Total		133,523

Source: NHDA

The slum and shanty improvement project was implemented in the CMC area by the Urban Development Authority. Thereafter, the National Housing Development Authority (NHDA) implemented successive programmes in all the urban local authorities including 12 municipal council areas and 39 urban council areas in the selected small towns as well. These programmes have been beneficial to the urban poor, as they pave the way for their social and economic mobility through the provision of appropriate shelter solutions together with social and physical infrastructure. Houses under these programmes were built through an incremental owner home-building process which eliminated the unsatisfactory aspects of contractor-built houses.

The experiences of contractor-built low income houses are that they are not affordable by poor families and in most cases, there is dissatisfaction with their construction quality and design. In several instances, the actual target group is neglected and these houses are

allocated to more affluent classes.

Declaration of "special project areas" under the UDA law, in appropriate locations in urban areas has also helped the urban poor upgrade their houses and settlement infrastructure

**6. Public Assistance Programme of the Colombo Municipal Council (CMC)**

In accordance with the provisions of the Poor Law Ordinance No. 30 of 1933, the CMC has been implementing a Public Assistance Programme under its Charity Commissioners Department over a period of six decades. The granting of relief to

the poor, the disabled and the aged, funeral relief, relief in times of natural calamities such as floods and fire, maintaining city homes for elders, city orphanages and day care centres, educational support to children of poor relief recipients, skills development and vocational training, provision of mid-day meals to students, and income generating activities for children are the major activities performed by the Charity Commissioner.

The number of public assistance recipients during the three years from 1993 to 1995 varies from Rs 10,490 m to Rs 12,419 m during the different months, the annual expenditures being Rs 339.6 m in 1993, Rs 343.9 m in 1994 and Rs 520.1 m in 1995.

Small-scale public assistance programmes are being implemented by the Kandy Municipal Council and the Galle Municipal Council too.

**7. Urban Basic Services Programme (UBSP)**

The objectives of the Urban Basic

Services Programme jointly conducted by the UNICEF, NHDA and the respective urban local authorities, are to increase the access of the urban poor to basic services, help translate the concern of the urban poor to ameliorate development programmes for them, strengthen the institutional capacity of ULAS and plan and implement child survival and development programmes. Those final objectives help reduce infant mortality rates, reduce morbidity among children, reduce the incidence of under nutrition, increase primary school enrolment, guide needy women to improve their well being, look after street children and prevent childhood disability etc. Phase I of the programme was implemented only in the CMC area from 1979 to 1983 at a cost of US\$ 1.0 m. Phase II from 1984 to 1988 was implemented in six ULAS, namely, Colombo MC, Jaffna MC, Batticaloa MC, Dehiwela Mt Lavinia MC, Kalutara UC and Moratuwa UC at a cost of US\$ 3.5 m. Phase III from 1993 to 1996 is being implemented in all previously mentioned ULAS and eight additional ULAS, namely, Kandy MC, Galle MC, Nuwara Eliya MC, Negombo MC, Matale MC, Kurunegala MC, Ratnapura MC and Badulla MC. The committed expenditure for Phase III is US \$3.02 m from UNICEF alone, apart from local counterpart funds from the Central Government and the relevant ULAS.

The establishment of UBSP units in all the relevant ULAS, the appointment of Community Development Officers in ULAS, 95 per cent immunisation coverage, the reported drop in diarrhoea cases and the high level coverage in water and sanitation facilities were the major achievements of this programme.

#### 8. Community Action Planning (CAP) Programme

This is a Community Development Programme specifically focused on the urban low income communities to help them achieve requirements such as shelter, infrastructure and supplementary income generation through social mobilisation. It has developed a carefully designed series of workshops, modules and video films that are effective in community organisation and the promotion of community awareness, strengthening of CBOs, involving the families in participatory planning,

decision-making and the implementation processes, thereby making them real partners of development rather than mere beneficiaries. The most important workshop modules are micro-planning, land and settlement identification, CDC formation and restrengthening, formation, community building guidelines, community contracts, community monitoring and evaluation, housing and loans information and community environmental health.

This programme was initiated and piloted by the UNICEF during its second phase of the UBSP Programme (1984-1989) and subsequently, the UNCHS fostered it through technical cooperation and funding support jointly with the NHDA. It has by now extended its practices to 14 ULAS - namely, Colombo, Kandy, Kurunegala, Matale, Galle, Badulla, Nuwara Eliya, Ratnapura, Negombo and Dehiwela, Mt Lavinia municipal councils and Kalutara, Moratuwa, Kotte and Kolonnawa urban councils as well as selected small houses. Under this programme, from 1985 to date, 707 such workshops have been conducted at a direct cost of Rs 3.52 m. This process can be very effective in shelter and settlement development, poverty alleviation and the incremental transformation of urban low income communities into a holistic development process.

#### POLICIES, ISSUES AND RECOMMENDATIONS

Even if there is no written statement of policies regarding urban poverty, the practices over the past four to five decades have evolved the actual policy. The slum and shanty clearance or eradication programmes mentioned in the Housing and Town Improvement Ordinance, Town and Country Planning Ordinance and the Urban Local Authority Ordinance were not rigidly carried out as the disturbance of such settlements was considered inhumane. The urban poor is influential and plays a vital role in urban politics which relies on a high proportion of their votes and therefore the political system is amenable towards their responses. However, up to now, the magnitude of urban poverty was scanty in relation to the rural poverty and therefore most of the poverty alleviation and development efforts were really targeted to the rural population. With the rapid urbanisation trend envisaged during the following two decades, the focus will

change and a comprehensive policy to combat and mitigate urban poverty will have to be evolved to consider the issues faced by the poor and the impact of such issues on city society in general.

Among the issues faced by the urban poor, the lack of sufficient credit facilities for their self-employment and enterprises, the lack of savings, inadequate skills and vocational capabilities, social exclusion and marginalisation, lack of an acceptable shelter and settlement environment, inadequate physical and social infrastructure, accusations regarding malpractices, prostitution and urban crimes, child and maternal health issues, irregular and insecure employment and incomes and lack of assets are critical ones.

The subsidy and charity programmes described above have not brought about the results envisaged in the case of the urban poor. Neither the government nor the poor communities can achieve these needs in isolation except through a continuous participatory process involving all relevant actors - the public institutions, private sector, NGOs, communities and their CBOs. Such a process would normally involve compulsory steps such as community consensus, organisation, participatory development planning, internal and external resource mobilisation, implementation of activities and project functions and finally, management and sustainability.

In the light of those issues and development requirements, the formulation of a comprehensive policy and a proper survey to create a comprehensive national data base regarding the urban poor living in all urban centres for planning and programming work, have become prerequisites.

Urban planners should take urban poverty as a major concern in their spatial and social planning. Further, land alienation and the regularisation of tenurial rights, financial assistance through credit packages, housing, public utilities, social infrastructure, community organisation, participatory planning for holistic development, skills development and vocational training are vital aspects for the upward mobility of the urban poor. ■

# Broader Measures of Economic Development

*the national accounts give an inaccurate indication of the nation's well-being, because it does not take into account the negative growth aspects*

by H. M. T. N. R. Herath

A broader understanding of development is required in order to measure economic development accurately. Measures of the overall income and output of a nation, namely, the national accounts, give an imperfect indication of well-being. In measuring economic well-being, positive (ie - benefits) as well as negative activities (ie - costs) need to be measured. Moreover, development consists of material as well as spiritual aspects; mere material development does not make a civilised society.

Almost every academic as well as the man on the street is interested in economic development, which is generally defined as being the process for improving the standard of living and well-being of the population. Some countries are considered 'developed' and a line between the 'developed' and the 'developing' has been drawn and major variables adopted, namely economic growth, the level of unemployment, incidence of poverty, degree of income distribution, economic stability and the standard of living. These variables are usually measured in terms of growth rate, the rate of unemployment, rate of population that cannot meet basic needs, the degree of relative income distribution, rate of inflation measured by a price index, and the human development index.

In the development process, the growth rate has been given the highest priority and is the measure by which other development measures such as employment, the standard of living, poverty, and inflation are directly influenced. It is the rate of change in the real level of production that consists of all commodities and services transacted at the market place. When we look at history, it is very clear that almost all countries experienced the growth mania only after the Second World War. Consequently, growth models were built up. In the 1960s, the equitable growth model was developed to incorporate social issues such as poverty alleviation and income distribution. In the 1980s, this model was broadened to embrace the concept of sustainable development, reflecting increasing concern about the environment (the negative activity of production at macro level was taken into account. Munsinghe 1993). All these growth models were and are, mainly concerned with material growth.

## Deficiency in National Accounts

Although the growth rate is important in measuring development, it contains some deficiencies, some of which have already been widely reviewed. Other deficient features are the inclusion of a number of commodities through which human well-being is diminished or destroyed.



With the advancement of technology, various products were invented by scientists. Dynamite was discovered, various types of guns, bombs, missiles, weapons, combat aircraft were invented. Thereafter, some countries produced, and have continued to produce these commodities in massive quantities and exchange them in the global market place. These goods are not used to enhance the natural environment but used instead for wounding, oppressing, threatening, killing human beings or destroying natural or man-made resources which can be used to increase the well-being of humanity.

Secondly, in the case of computer technology, although being essential for progress in a number of areas, by increasing the efficiency of production and saving time spent in decision-making, the development of virus software programmes result in the incurring of additional costs and delayed activities as well; this ultimately decreases efficiency. As such, including the production of all these commodities in the national accounts and presenting an expanded rate of growth is totally inaccurate.

## Negative Activities

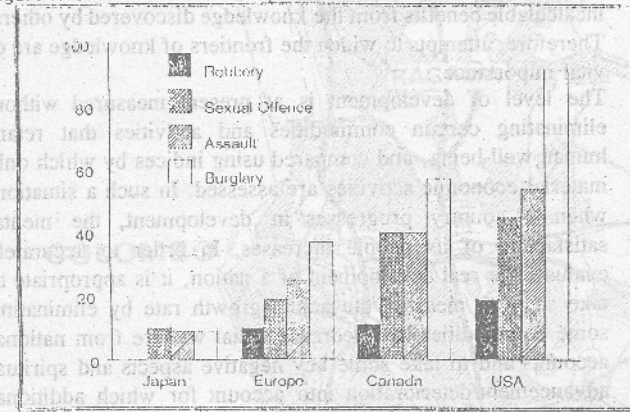
Existing development indices have been inclined to capture positive economic activities only. In other words, they focus on the 'good' but neglect the 'bad' aspects. The incidence of crime and violence, accidents, suicides, consumer fraud, etc. denote the negative side of the economy and create disabilities for their victims. According to Ayn Rand (1961), if society either robs an individual of the product of his effort, enslaves him, attempts to limit his freedom of mind or compels him to act against his own rational judgement, it is not a regular society, but a mob, rather. Such a society destroys all the values of human existence, has no possible justification and represents not a source of benefit, but a dire threat to man's survival. Moreover, even a harsher system could not function in

a society where crimes and frauds occur excessively, because economic transactions are forcibly obstructed as a result. Criminals may be a small minority, but in the presence of crime and violence, no civilisation can develop or be maintained.

The so-called developed countries experience a high crime rate (social 'bads'). The United Nations Inter-regional Crime and Justice Research Institute (UNICRI) in its report in 1993, states that, "crime rates have increased markedly in almost every major industrialised country except Japan in the past three decades. For the common public, being a victim of crime has become a common feature of life in most urban settings".

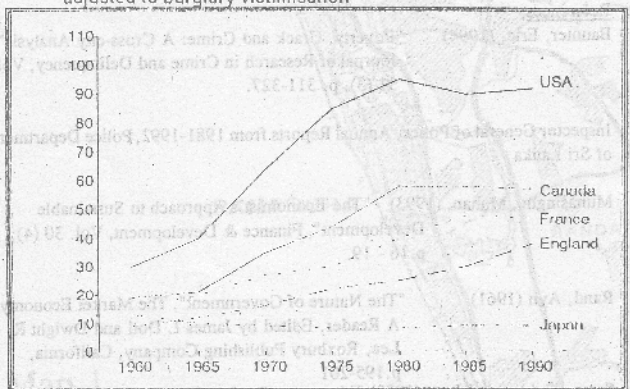
To ascertain the difference between the social 'bads' in developed and developing countries, a comparison is required, but the available data is limited. At the same time, data of some countries may differ in their definition of 'bad'. However, when differences become greater, then the error due to the change in definitions may reach zero. Figures 1 and 2 show the rates of crime in selected countries.

Figure 1: Criminal victimisation per 1,000 adults - 1988



Source: UNICRI Report 1993

Figure 2: Trends in national occurrence rates of crime - police statistics adjusted to burglary victimisation



Source: UNICRI Report 1993

Robberies, rape and burglary in Sri Lanka reported in the IGP's (Inspector General of Police) Annual Report of 1988 stood at 6,680, 291 and 9,881 respectively. These figures represent rates of less than unity per 1,000 population but are very high in developed countries, as given in Figures 1 and 2. According to the IGP's Annual Report statistics between 1981-1992, the annual number of grave crimes in Sri Lanka peaked



at 59,056 in 1989. This represents a rate of less than four per 1,000 people. The UNICRI report of 1993 records the highest sexual offence rate as being 5.6 per cent in Australia in 1991, and 3.3 per cent and 3.2 per cent respectively in West Germany and Poland in that year. According to the IGP's Annual Report, during the period 1990 to 1992 in Sri Lanka the number of rapes recorded a maximum of 374 which represents a rate close to zero per cent. This evidence indicates that crime and violence in Sri Lanka stands at a relatively minor level.

In criminology, the causes for crime and delinquency have been analysed. Yet no single theory explains these causes. Different patterns of crime and delinquency require different causal explanations. Economic reasons are considered to be one cause of crime.

The Dutch criminologist William Bonger was the principal proponent of the theory of economic causation of crime. Bonger attributed criminal acts, particularly crimes against property, directly to the poverty of the proletariat in a competitive system. Poverty which resulted from unsuccessful competition leads to personal disorganisation. But poverty alone does not cause crime and most poor people are not criminals. The cause of poverty can be remedied through the reorganisation of the means of production and the development of a classless society.

Economic determinism as part of a contemporary radical criminology has been supported by the work of Gordon and others. According to this view, capitalist societies depend basically on competitive forms of social and economic interaction, upon substantial inequality in the allocation of social resources. Without competition and competitive ideology, workers may not be expected to struggle to improve their relative income and status in society by working harder. Although property rights are protected, capitalist societies do not guarantee economic security to most members individually. Driven by the fear of economic insecurity and by a competitive desire to gain some of the goods distributed unequally throughout society, many individuals will eventually become criminals.

At present, economists believe that economic welfare can be achieved by competition and therefore market-friendly policies are recommended. But according to the above discussion, it is obvious that crimes are the outcome of competition. Hence, it can be interpreted that crime and violence are the costs of competition. But it does not carry implications of removing

market-based economic policies. Instead, when the level of production is calculated, in national accounts, to determine the level of development, the cost of the former which stands for crime and violence can be reduced or measured as negative benefits.

Furthermore, the UNICRI report of 1993 states that the increase in the availability of goods also leads to crime. This implies that economic growth and development themselves create social bads. This is correct on one hand, because almost all economic activities individually entail advantages (benefits to a certain person or group of people) as well as disadvantages (costs). The worth of each activity is decided by comparing the benefits and costs. Therefore, crime can be considered as being a cost of economic growth or activity.

### Spiritual Aspects

The human being has two types of requirements - physical and mental. Especially for physical requirements, he tries to produce more because he needs to consume more. On one hand, the level of consumption is measured by present development indices such as the growth rate, standard of living, poverty and income distribution and hence, only the material aspect is considered in the development process. In a sense, by increasing the level of consumption, countries try to reach higher utility levels.

Even if material development satisfies physical requirements, it does not yield mental pleasure which can be considered the ultimate goal of life of man. Therefore, material advancement alone can achieve only one of the two goals. Attention should be paid to two major facts. Firstly, over-consumption leads to a number of diseases incurring some kind of cost to be measured. Secondly, in spite of material development, people have to suffer from mental pains or distresses due to a number of solutions (incurable diseases, separation from beloved ones, divorce etc.) both in the regional (natural disasters, ethnic problems etc.), and at the international level (international wars etc.). Therefore, in addition to material development, spiritual status is also of crucial importance in the



determination of the level of well being of the society concerned.

### Utility: A Measure of Development

Economic development can be considered to be the ultimate goal of economic activity and through such development, it is expected to achieve higher utility (both physical and mental) levels through equitable means. Therefore, in the course of time, a society is expected to progress gradually towards possible maximum utility levels. On the other hand, due to several reasons either natural or man made, disutility is also created. In a sense therefore, a society attempts to minimize such activities. Hence, the optimal point of satisfaction may be the point at which utility is maximised while disutility is minimised. If, at a certain point, utility is maximised but disutility is not minimised or vice versa, such points are required to be compared logically to evaluate progress.

Man is the only being that can transmit and expand his store of knowledge from generation to generation. Every man gains incalculable benefits from the knowledge discovered by others. Therefore, attempts to widen the frontiers of knowledge are of vital importance.

The level of development is at present measured without eliminating certain commodities and activities that retard human well-being, and compared using indices by which only material economic activities are assessed. In such a situation, when a country progresses in development, the mental satisfaction of its people increases. In order to accurately evaluate the real development of a nation, it is appropriate to take steps to measure the actual growth rate by eliminating some commodities that decrease social welfare from national accounts and to take some key negative aspects and spiritual advancement/deterioration into account for which additional indices need to be constructed or existing ones broadened. Real development is the progress in the environment as well as the development of body and mind. ☐

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KOCHCHIKADE

# Urbanisation in the Colombo Metropolitan Region

NEGOMBO

KEGALLA

MIRIGAMA

VEYANGODA

MINUWANGODA

GAMPAHA

RAGAMA

AVISSAWELLA

COLOMBO

HOMAGAMA

PANADURA

HORANA

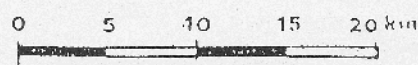
BANDARAGAMA

RATNAPURA

KALUTARA

BERUWALA

Map 1



- REGIONAL MOTORWAY
- MAIN ROADS
- RAILWAYS
- SINGLE TRACK
- DOUBLE TRACK

(see 'Urbanisation and Urban Growth in Sri Lanka' page 20)

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