A CRITICAL REVIEW OF PLANS FOR THE DEVELOPMENT OF COLOMBO CITY AND SOME TRENDS IN PLANNING

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Multifunctional Colombo, the capital city and chief port of Ceylon was a functional magnet inducing powerful centripetal and consequent centrifugal forces which had resulted in the dense and concentrated pattern of settlement especially around its core areas, the Fort and Pettah, in a zone that may be termed as inner-mixed¹. With the demolition of the Old Fort structures, (fortifications and ramparts) there began the renewal of the fabric with modern block buildings for commerce, business and governmental administration (1880-1930). The construction of residential buildings also began and continued to spread out laterally along the existing pattern of roads. Some of these buildings have been constructed with little consideration for air space, lighting, ventilation, drainage and access to cleaning. The uncontrolled and irregular building spread was checked to some extent by the Housing and Town Improvement Ordinance No. 19 of 1915. These regulations attempted to control the size, orientation, spacing, height, and spatial arrangement of buildings, to permit sufficient direct sunlight to the buildings and maximise ventilation. The chief features of the bill were its preventive and remedial measures. These were fourfold: (1) No building was to be erected unless roads existed to serve them. (2) No building was to exceed in height the width of the street on which it was situated. (3) Rooms were to be provided with sufficient space, ventilation and light. (4) Open spaces were to be provided in the rear of the buildings as a common channel of ventilation behind continuous rows of houses. These remedial measures marked a general improvement in housing, housing reconstruction and street schemes. Town planning in Colombo was the necessary corollary of this Ordinance of 1915.

II. The Geddes Plan

This was followed up by a comprehensive plan for the development of Colombo City drafted by Patrick Geddes in 1921. (The Geddes Plan²). His ideas about city housing were clearly stated:—"to be houses, houses must have

^{1.} For details of population analysis on a ward and zonal basis, see, B.L. Panditharatna, "Colombo City: Its Population Growth and Increase, 1824-1953". The Ceylon Geographer, Vol. 14, 1960.

^{2.} Sir P. Geddes, Town Planning in Colombo, A Preliminary Report, Colombo, 1921.

a certain individuality, else home pride becomes lost and health conscience fails and is even forgotten"³. Slum clearance and rehousing important remedial measures, if carried out would make Colombo a leading city among her sister cities in this aspect of improvement and social policy.

A city reflects its beauty, if not its glory in its region. Thus a city should necessarily be planned along with its region. His plan for a "Greater Colombo" with garden suburbs shaping into sub-urban centres introduced a new trend in city planning—the garden city idea. Colombo, although the capital city with a heavy concentration of functions, would appear then as the garden city preserving the rural spirit. The suburbs should be planned as dormitory zones for officers, workers and others employed in the city. As for this aspect of the proposal, it would seem rather impracticable to induce the working classes to reside in such dormitory areas, situated away from their places of work, without improving the public transport system. As shown in the pattern of settlement and congestion in the inner-mixed zone, the workers (especially those engaged in the Port of Colombo and the Pettah) prefer to undergo any inconveniences in living (many huddled together in one room) rather than stay away and undergo other difficulties, so well known to the Colombo bus commuters even today. The garden city idea in this aspect of housing the city workers was unpractical.

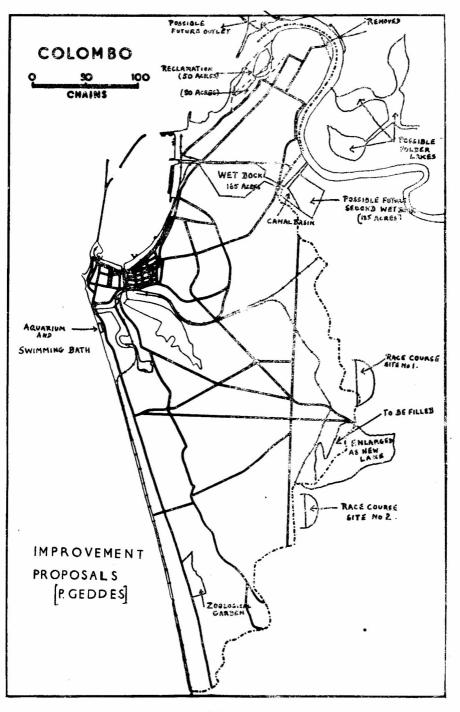
The Geddes Plan emphasized horizontal expansion, an extension of the garden residential suburbs, which be preferred to vertical growth of multiblock apartments confined to the city area itself.

Recognising the details of the configuration of the Colombo site with special reference to its internal water bodies, (the Beira lake and the marshy tracts) Geddes viewed the problem of harbour construction as a very necessary step in the growth and the development of the city. "Since the harbour is fundamental to Colombo, so must its future extensions not only increase the town, but largely determine its layout"⁴. He proposed a wet dock scheme to occupy most of the swampy areas of Koraliayawala and Kimbulawala (an area about 165 acres, see Fig. I) with a possible extension into a second dock to occupy the Weragoda and Urugoda marshes, east of Dematagoda (about 135 acres). This design for an internal harbour within the city site itself, if implemented undoubtedly would have led to a very different spatial pattern of city growth and development.

Perhaps, he was planning the harbour and facilities to suit the requirements of shipping (size, length and draught) and the import-export trade of that time. But this internal dock scheme would have provided only 300 acres for the anchorage of ships, whereas the outer harbour provided by means of the three major breakwaters gives an area twice as large than the dock scheme. Besides, owing to technological changes in ship building, one may doubt whether the

3. op. cit., p. 9.

4. op. cit., p. 21.



internal docks (if constructed) would permit the entry of modern large size steamers which frequent the harbour today. It is likely that his harbour plan did not anticipate at all the numbers, frequency and volume of shipping that would be likely to converge at Colombo in the future. He was more concerned with the idea of an harbour in relation to city growth than perhaps, planning Colombo as a national harbour for Ceylon to cater to its all island hinterland, increasing imports and exports and serving also as an international transit port in the Indian Ocean. In fairness, it may be said that Geddes was no harbour designer, though an expert town planner.

He recognised the limitations of the site in respect of the floods of the Kelani river inundating about one-eighth of the city surface area, rendering them uninhabitable. Flood control and reclamation were the two obvious remedies to effect a natural growth of the city eastwards. Since, he did grasp accurately both the physical situation and circumstances (hydrography and hydrology) of the Kelani river and their effects on the city, he suggested the straightening of the meanders of the river, dredging its shallows and narrows; reclamation of the adjacent low lying lands and transformaton of the present swamps into lakes and polders.

Geddes was not merely a town planner, he was in fact keen on town aesthetics also, in creating a town environment. He proposed a Galle Face Prommendade and Marine Drive, Zoological Gardens, Marine Aquarium, a Museum and even an Horticultural Society. His experiences in Indian cities had convinced him the intrinsic and lasting merits of ornamental, elaborate and cosmopolitan oriental architecture and the need to retain them in the town's fabric. He therefore strongly approved that oriental town architecture should evolve from a combination of the ideas of the Traditionalists and the Modernists and should display a variety of building forms and design with public taste. The removal of the lunatic asylum, infectious diseases hospital, railway workshops and the jail from the city to the suburbs was also recommended. Further, the race course and the golf links situated in a central zone of the city, occupying large and valuable space, serving exclusively the recreational interests of a small minority were to move out from their sites to less central and less valuable locations in the suburbs.

Whatever be the merits and demerits of his suggestions, the fact remains that the Geddes Plan became the key-stone in town and regional planning. Future trends were anticipated by Geddes: —"Regional and city development will thus soon become as familiar conceptions of thought and practice to the best minds of the rising generation, as are machinery and money, business and pleasure, economics and politics to the minds of our declining one"⁵,

5. op. cit., p. 34.

The Geddes Plan, although well conceived posed many practical difficulties, because of the limited finances of the municipality, and more so because a wet dock scheme was more a national than a municipal project. It was not acceptable. Again, the reclamation of the marshes was certainly an expensive project. The shifting of the race course presented legal problems because of a long lease and vested interests. River control and poldering were expensive enterprises.

It is clear that the implementation of his proposals required a competent "Regional Authority" with necessary legal powers and funds to plan for the entire "Greater Colombo area". But, such a planning body never existed nor were any attempts made to create one. The Colombo Municipality's powers were legally confined to its municipal limits. The adjoining urban and village councils (those within the Greater Colombo area) were neither interested in these projects nor were informed, nor had the necessary finances to join collectively in these enterprises.

Although the Colombo Municipality carried out slum clearance, re-housing and new housing schemes confined to its area of authority, the problem of crowding and congestion especially in the inner-mixed zone increased to such proportions that it always posed a grave civic problem endangering standards of public health, hygiene and sanitation.

III. Holliday's Memorandum on City Planning

Professor Holliday was invited to study the problem of city planning and he presented his proposals in a memorandum entitled "City of Colombo : Memorandum on Town Planning". The essentials of this report may be itemized as follows :—

(1) It recommended functional zoning of the city for different land uses, commercial, industrial and residential. This meant planning with relation to the uses and differences, existing and potential, between the various component parts of the city. Zoning therefore would not only stabilize the existing character of the district but also provide incentives towards further improvement by the security it would offer to property owners. The character, use, height, density of buildings and building lines for each zone were specified. For example, in commercial areas, the street line was generally the building line and the height of the buildings to be controlled by the width of the street; in industrial areas, buildings were to be set back from main roads, space to be allowed for service roads and adequate open spaces in the rear; in residential areas, all buildings were to be set back from roads so as to provide gardens.

(2) The city was 'over-roaded' and therefore planned for street limitation. However, only about 12 per cent of the total area (some 700 acres)⁷ is occupied by

^{6.} C. Holliday, City of Colombo, Memorandum on Town Planning, Colombo, 1940.

^{7.} Computed from data obtained from the Municipal Engineer's Department, Colombo Municipality, 1958,

✓ roads, a figure which increases to about 20 per cent in the Fort and Pettah. It is indeed true that the roads had been planned irrespective of a comprehensive traffic system, leading to the glaring problem of roads directed to the core and having to pass through it. This is because either when planning the road system or traffic circulation system, the city had not been considered as a whole. A realignment of arterial roads to enable a smooth flow of traffic, the construction of a new bridge over the Kelani Ganga at Sedawatta and to make use of this road as a by-pass through Base Line Road to improve the transit traffic from Colombo North to South and inter-regional links to the Kandy Road were recommended.

(3) The suggestion to locate the railway terminus outside the city limits was most impractical. Perhaps, he did not stay long enough to assess the commuting pattern of the city or to calculate the relative percentage of railway commuters. Since 60 per cent of the employed are railway commuters, direct railway transport to Maradana and Fort was important to them to save time. A shift of the terminus elsewhere outside the city would have interrupted badly the existing transport pattern and lead to chaos, because bus transport services would find it difficult to transport the commuters from a new terminus to their places of work efficiently and punctually⁸. A shift of the terminus, since the railway services did not interfere with the road circulation system and the need to remove the railway services out of the city then did not arise.

(4) The Plan observed the uneven distribution of public open spaces, their concentration in Central Colombo and the extremely low acreage, about 200 of public open spaces for the city as a whole. But considering the semi-public, private open spaces and gardens, it may be said that the city possess about 12-15 per cent. However, these areas are not available for public use. He proposed a green belt surrounding the city occupying the low lying areas for the use of the public.

To all the town planning experts slum eradication was one of the main problems. The "Slum Survey of 1941"⁹ included about 1,132 acres as slums an area about one-eighth of the city surface. The problem perhaps was too difficult for an immediate solution because of its scale. A drastic policy of slum clearance would be too inhuman because of displacement of large numbers of people and

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^{8.} It is generally observed that the present Ceylon Transport Board bus services serving the Colombo commuting areas are both inadequate and irregular, thus inconveniencing the commuters. The situation would be worse if the C.T.B. handle the additional burden of transporting the commuters from a new railway terminus outside the city to their places of work in the city.

^{9.} S. Fernando, O.T.F. Seneviratna and O. Weerasinghe, City of Colombo, Slum Clearance and Re-housing Programme, Colombo, 1941.

consequent social distress. Therefore, a short term policy of slum clearance and re-housing and long term housing schemes ranging from 10 to 20 years were considered a partial solution provided the finances permitted it.

Professor Holliday's short stay here did not permit him to study in detail the regional bases and implications of his plan, especially in the light of changing socio-economic and urban forces. He too suggested the development of satellite towns to induce migratory tendencies from the city towards them. Finally, he suggested the procedure, rules, aims and method of town planning which were later incorporated in the Town and Country Planning Act No. 13 of 1946. This act provided planning powers on a wide basis, the necessary pre-requisite for the creation of the Town and Country Planning Department.

The Town and Country Planning Department established by virtue of the Town and Country Planning Act, No. 13 of 1946 undertook aspects of physical planning of Ceylonese towns. As in infant department, it had a small staff and meagre resources. Its aims and policies were similar to those of its English counterpart. One of the first problems it decided to study was the planning of Colombo City and the services of Sir Patrick Abercrombie were obtained in 1948.

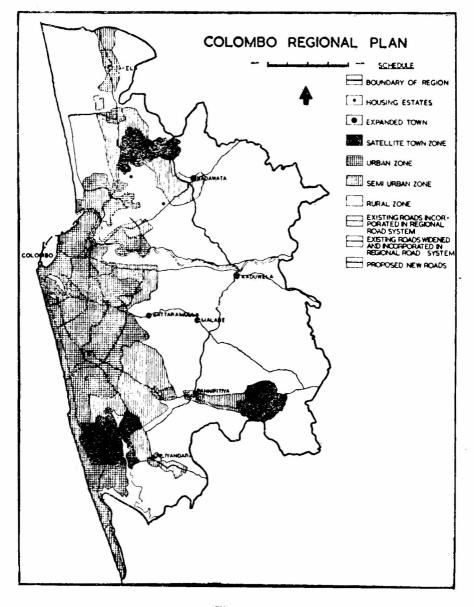
IV. The Abercrombie-Weerasinghe Proposals: Colombo Regional Plan

The Colombo Regional Plan of Sir Patrick Abercrombie and O. Weerasinghe covers an area about 220 square miles. The Region embraces the capital city, the built-up urban areas that adjoin it, the suburbs and considerable extent of rural country (see Fig. 2). The Region extends up to Ja-Ela in the north, to Moratuwa in the south. The western boundary is the sea coast and the eastern boundary is about 14 miles inland.

The Regional Plan¹⁰ seeks to propound a few broad principles which should govern the preparation of local schemes and ensure that they fit into a larger pattern. There are five major proposals, the first two are closely inter-related.

- 1. To resettle about 7,000 working class families and 2,000 middle class families who cannot be provided with accommodation in the city. This movement will account for about 100,000 people for whom accommodation is to be found in the Region.
- 2. To develop three new towns, those of Ragama to the north, Ratmalana to the south and Homagama to the east of the city respectively, as satellites to the central urban mass of Colombo, but independent as regards employment. Each town is to accommodate about 35,000 people.
- 3. To decentralise certain government departments, industries, institutions from the city to these satellite towns and the Region.

^{10.} Sir P. Abercrombie and O. Weerasinghe, The Colombo Regional Plan, Colombo, 1947.





- 4. Regional zoning into urban, semi-urban, satellite town and rural areas (see Fig. 2) in order that appropriate regulations may be framed under Town and Country Ordinance to control the disposal and use of land in each zone, and to secure that uniform action throughout the Region is taken particularly to prevent a straggling growth taking place in the semi-urban zones and in the neighbourhood of the new towns. In the urban zone is found high building densities and mixed uses so that restrictions are urgent. In the semi-urban zone, it is necessary to avoid the evils of haphazard building development. In the rural zone of villages, gardens, agricultural lands and shrub, the aim is to preserve the amenities of the countryside and integrate this area to a regional planning authority.
- 5. The planning and reservation of land for the construction of a 'ring road' within a distance about 12 miles from Colombo.

V. Present General Policy and Planning Schemes

The Abercrombie-Weerasinghe proposals constitute the main directional trends of the plan for the development of the metropolitan area subsequently amended according to the decisions of the Central Planning Commission meeting of February 1957¹¹. The present policy considers two problems. First, overcrowding and congestion within the city, second, the increasing rate of urbanisation of the adjacent towns and their contiguous areas. The policy is therefore to carry out planned development of satellite towns within the Region to accommodate the overflow of people from crowded city areas. Secondly, to plan new towns, expansion of small towns, housing estates and cooperative housing schemes in the Region¹². An experiment in this respect is the development of Ratmalana, Ragama and Homagama.

Ratmalana is ten miles to the south of Colombo Fort and is along Galle Road, the southern artery. The site is about 3,600 acres and planned to be a new industrial and governmental centre. The excellent accessibility of the site, the \checkmark cheap land available there, the availability of electricity and water have attracted many new industries, institutions and housing to this location. The northern satellite of Ragama is about 2,287 acres and is a railway junction, hospital and religious centre. Homagama is about 1,955 acres, along the High Level Road. Both these towns could offer cheap, congenial surroundings for residence well served with some urban utilities and institutional functions.

^{11. &}quot;An Outline Planning Scheme for the Regional Development Area of Colombo", Department of Town and Country Planning, 1957 (unpublished).

N. Gunaratna, "Application of Regional Planning Techniques to Metropolitan Area", Dept. of Town and Country Planning, Colombo, 1959 (unpublished).

The other important task is to implement the zoning system so as to check non-conforming land uses and to ensure orderly and planned growth of the Region. But, this is a task for a 'Regional Authority' vested with the necessary powers to implement the scheme. Since such a body does not exist, it is doubtful whether the zoning system will be adhered to in the Region. Perhaps within the city, zoning may be followed despite many irregularities and exceptions and certain types of land uses may be necessarily restricted to certain zones.

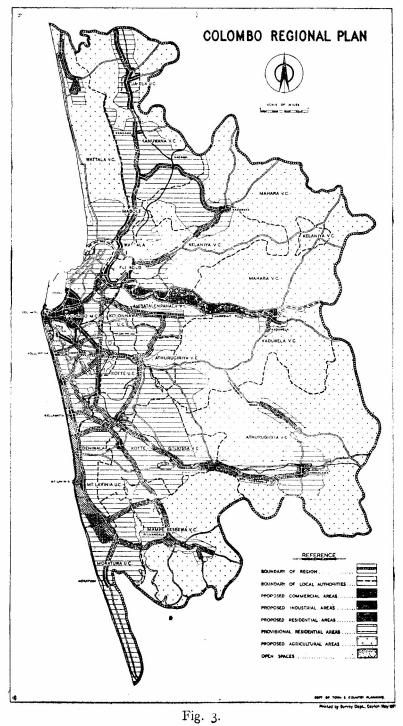
The main features of the zoning system are :-- (see Fig. 3)

- 1. The proposed commercial areas are to be along the arterial roads that radiate from the core, such as Colombo-Galle Road up to Moratuwa; Colombo-High Level Road up to Homagama; Colombo-Kandy Road up to Kelaniya; Colombo-Negombo Road up to Ja-Ela and all the other major thoroughfares leading from Colombo to the other sub-urban towns.
- 2. The proposed industrial areas show two patterns. (a) The light industries which are inter-mixed with commercial and residential uses are flanking the circulatory systems. (b) The heavy and obnoxious industries are confined to the eastern fringes of the city and elsewhere, to such locations so that these may not be nuisance features.
- 3. The residential areas are widespread in the city and in the Region. The provisional residential areas occupy all areas free from floods (godabima) which are under garden type of cultivation.
- 4. The agricultural lands under paddy are in the low lying and marshy areas, those under market gardens and tree crops occupying the lands above flood level, but are subject to seasonal inundation.
- 5. Open spaces are reserved in the urban, semi-urban and planned towns and these are abundant in the rural tracts of the Region.

VI. Some Trends

The heavy, and in fact excessive concentration of import-export functions of the whole island on the Port of Colombo needs to be deconcentrated for strategic and economic reasons. It is very undesirable for a country to be dependent on a single port. Besides, in a small country like Ceylon with good road and railway access and short distances from the interior productive hinterland to the coastal ports, these are good reasons to develop them, because they have functioned as entrepots in the commerce of the Indian Ocean. Galle, Trincomalee and Kayts are historic ports which should be developed as subsidiary ports of Ceylon. It is necessary to emphasize that port development has consequent

^{13.} B.L. Panditharatna, "The Colombo Townscape: Some Aspects of its Morphology", University of Ceylon Review, Vol. XIX, No. 1, 1961.



good effects on the industrial and economic development of the port-region, a phenomena so desired and essential to diversify the lop-sided regional development and industrial concentration in the Colombo Region. The onus of developing these Ceylonese ports, the policies regarding the allocation and direction of cargoes to them and the incentives towards industrial, institutional and commercial growth of such ports should necessarily rest upon the government.

Galle when developed should not only be another outlet for the agricultural raw materials, but also a port of entry to the bulky cargoes, such as foodstuffs. Would not the Port of Galle then help to relieve congestion at Colombo? Similarly, Trincomalee would be a fine cargo handling and trans-shipment port in relation to the trade with South-East Asia and Far East. With its excellent and extensive harbour and oil storage facilities, why should it not be the location for oil refining and ancillary industries: <u>Kayts</u>, certainly can be the importexport port for <u>Indian goods</u>, when facilities are developed to accommodate ships of moderate size. Would not the development of these three ports leads towards a devolution of port functions concentrated on the Port of Colombo?

Although the commercial and business functions are concentrated in the core, (Fort and Pettah) the lateral expansion of the city has resulted in certain structural and functional shifts especially to the secondary cores, in certain favourable junction centres. (Kollupitiya, Bambalapitiya, Wellawatta, Maradana, Borella and Slave Island). A recent trend despite zoning is that the more lucrative urban land uses (commerce and industry) tend to encroach into the residential areas. If some balance in urban land uses and functional zoning has to be maintained, then the city has to search for new residential areas, in fact reclaim its much desired eastern swarmpy tracts. In this respect, if Morrison-Knudson proposals for reclamation of swamps in and around the city are to be implemented, Colombo City will gain an additional effective surface of 590 acres in Kotahena and Kuppiawatta¹⁴.

The new Kelani bridge at Sedawatta has provided an additional artery to and from the city. The New Kelani Bridge Road-Base Line Road can be developed as a new locus for commercial and industrial uses. Cheap sites along these roadways should attract the firms dealing with bulky goods, hardware, motor repairs and garages. This area may be a bulky goods area, similar to Skinners-Panchikawatta segment. It may be expected that the latter may become another retail shopping area similar to the Pettah bazaar¹⁶.

Colombo does not require any new roads. The existing ones need widening and improvement. This is urgent because in the past decade, the volume of motor traffic to and from the city has increased enormously. Traffic control

^{14. &}quot;Report of the Committee on Reclamation and Utilization of the Swarmps in the City of Colombo", Ceylon Sessional Paper—XXI, 1957.

B.L. Panditharatna, "The Functional Zones of the Colombo City", University of Ceylon Review, Vol. XIX, No. 2, 1961.

and parking are some of the problems. The 'uni-flow' scheme operating in the Fort, the 'one-way' traffic system in the Pettah and other crowded areas, the limited parking hours at the bazaar areas and alternative road side parking for odd and even days are commendable. It would be more practical and certainly help a quicker flow of traffic, if the carriageways of some of the arteries are broadened by reducing the spaces occupied by bollards, islands, roundabouts and wide pavements. The Maradana Junction and Lotus Roundabout call for special planning which is a problem for the traffic engineer. Fly overs may be suggested irrespective of course of their financial implications. Overhead traffic bridges at two other places, namely Dematagoda railway-road intersection and Slave Island railway-road intersection may also be suggested to avoid traffic stagnation at these points.

In the Region, the dormitory areas and the satellite towns should be provided with facilities of water service, drainage and improved transport services to the city.

The proper expansion of Colombo lies in its horizontal growth. Decentralisation of governmental officers, industries, institutions, establishment of industrial estates away from the city; extension of the dormitory zones into the suburbs and to some extent a limited scheme of zoning account for the present pattern of spatial growth, which are likely to be the trends of future expansion. Finally it is the pride of every citizen to make the capital in every sense a garden city. It is therefore the responsibility of the city fathers to fulfil the expectations of the nation. Planning of Colombo should therefore be based upon civic diagnosis, a detailed study of the character and evolution of land uses, on sociological and economic trends, on urban and rural interdependence.