URBAN REDEVELOPMENT IN SRI LANKA

Vinod Moonesinghe

It is reported (*vide The Sunday Times* of 13th February) that recommendations have gone to the Government, regarding the implementation of a new urban plan for the Greater Colombo Area (GCA), which is intended to create a 'supercapital' on the lines of Singapore.

Apparently, the background for this plan lies in the recognition by the powers that be that the infrastructure of the present GCA is overstrained. However, by concentraiing on urban expansion withint the megalopolitan area, the plan seems to ignore the fact that the area is grossly congested.

To these figures must be added the populations of adjacent An indication of the extent of overcrowding is given by the census data for 1981 (the last year that a census was taken). Table 1 gives the relevant figures for Municipal Councils (MCs) and Urban Councils (UCs) within the GCA. The GCA is here understood to mean the roughly triangular area-reaching from Negombo in the north to Wadduwa in the South and from Colombo Fort in the West to Padukka in the East-which forms a contiguous megalopolis..

Table-1

Local Authority	Area(sq.km)	Population	Polulation Density(persons/sq.km)
Colombo	37.3	587,647	15,755
Dehiwala-Mt Lavinia MC	21.0	173,529	8,263
Moratuwa MC	13.2	134,826	10,214
Kotte MC	15.8	101,089	6,395
Kolonnawa MC	4.9	41,005	8,368
Negombo MC	10.4	60,762	5,843
Wattala-Mabole UC	9.0	19,957	2,217
Peliyagoda UC	4.5	25,466	5,659
Seeduwa-Katunayake UC	10.2	31,491	3,087
Panadura UC	6.0	31,091	5,182
Total	132.3	1,206,813	9,122

(Source: *Census of Population and Housing 1981, General Report)*

Over a decade later, in lieu of a census, it is estimated that the population of these areas had increased by approximately a quarter, so the average population density would be of the order of 11,500 persons per sq.km. By way of comparison, New York City (the most densely populated city of the USA) had a population density of 9,397 persons per.km in 1990, only little higher than that of such a relatively low-density town as Kotte.

To these figures must be added the populations of adjacent urban areas within the GCA, such as Kotikawatta-Mulleriyawa, Battaramulla, Maharagama, Kelaniya and Hendala. The populations in 1981 of only those declared as urban areas, i.e. the old Town Council (TC) areas, totalled 208,091 in the Colombo district and 192,436 in the adjacent districts.

With the addition of the populations of urban areas not declared as such - i.e., the non - TC areas of the *Pradeshiya Sabbas* (PSs) within the GCA which could be classified as 'urban' - and accounting for the population increase in the years since the census was last taken, we easily get a total population of nearly three million for the GCA, with an overall population density of over 7,000 people per square kilometer.

Singapore, upon which our planners fix their starry eyes , has a similar population. However, the population density there is a mere 4.750 per sq.km or about two-thirds that of the GCA as a whole. To match the population density of Singapore, the GCA would require an area of about 1.5 times its present size, but with the same population. It should also be noted that Singapore cannot be termed an ideal city.

The originators of modern town planning, such as William Morris, T Fisher Unwin and Ebenezer Howard, gave 12 persons per acre (or 3,000 per sq.km) as the ideal population density. This gross population density included public open space (i.e. the areas reserved for roads, parks and playing fields) as well as residential, commercial and industrial areas.

This figure was supported by the Reith Committee on New Towns. The figure recommended for 'residential areas' (nett population density-i.e. excluding public open space and areas of industry and commerce) was 7,500 persons per sq.km. It should be noted that the **gross** figures for the MCs and UCs in the GCA exceedthis ***nett*** recommendation.

Pressure on Open Space

The need of accessibility in turn creates presure on the remaining unoccupied lands surrounding the centre, leading to occupation of public open space (the open space provide a counterbalance, albeit inadequate, to the pollution emanating from the thousands of motor vehicles that enter Colombo every day). As a result of this pressure, the reclamation of the marshy lands in and around Colombo City, has increased the population density while reducing the available open breathing space.

Table - II

Local Authority	Area (SQ.KM)	Population	Ideal Population
Colombo MC	37.3	587,647	111,900
Dehiwala-Mt Lavinia MC	21.0	173,529	63,000
Moratuwa UC	13.2	134,826	39,600
Kotte UC	15.8	101,039	47,400
Kolonnawa UC	4.9	41,005	14,700
Negombo MC	10.4	60,762	31,200
Wattala-Mabole UC	9.0	19,957	27,000
Peliyagoda UC	4.5	25,466	13,500
Seeduwa-Katuunayake UC	10.2	31,491	30,600
Panadura UC	6.0	31,091	18,000
Total	132.3	1,206,813	396,900

By this measure, the ideal populations for the MC and UC areas appearing in table I would be as stated in table II (figures as per 1981 census).

In other words, for just the MC and UC areas of the Colombo megalopolis to achieve an ideal population density, the relocation of about three-quarters of their residents (as of 1981) would be required. Extrapolation of these figures to the GCA as a whole, allowing for population growth since 1981, indicates that the population should be halved.

Unfortunately, developments in the GCA have tended in the other direction, towards greater concentration of population. New office/shop/residential buildings have come up (or are planned) in the centre of Colombo City, which provide magnets for population growth. For example, the new commercial/ residential block coming up in Echelon Square will effectively double office space in the Fort, so that the requirement for accessibility to the area will be doubled.

The plan mentioned above is merely a part of this tendency. It ignores the need for lowering the population density, as well as the ecological requirement for unoccupied open space. Admittedly, it is imaginative in terms of increasing flood-control and improving accessibility to the city centre. However, it is the methodology lying at its core which is faulty. It lays emphasis on reclamation of land for construction purposes and of access by **private vehicle** to an already over-congested urban slum. At one fell swoop, this plan seeks both to increase the pollution-generating vehicle population and to reduce the countervailing force of open breathing space.

The plan should not be taken in isolation to other developments. it seems likely that the extensive land belonging to the Railway Department, lying between Dematagoda and the Fort (most of it reclaimed from the Beira Lake since 1908), will be sold or leased. This land, which is considered prime commercial property, mainly consists of open space. Its disposal for commercial purposes would undoubtedly add to the snowball-effect of increased traffic congestion, pollution and population concentration in the whole area.

The establishment of the Free Trade Zones at Katunayaka and Biyagama had a similar effect to the concentration of commerce in the centre of Colombo, being one of the prime causes for the explosion of population in the Gampaha District areas of the GCA. It has led to the destruction of coconut land in the area-another example of increasing congestion and decreasing counterbalance. The proposed reclamation of Muthurajawela (like the above-mentioned plan) will, in all likehood, accelerate this trend.

There is also a moral argument against such development (apart from the harm caused to human residents); what about the other species that occupy the space under consideration? The marshes, canals and lakes form an ecosystem, which several species share. Scores of species of birds have been observed in the waterlands, which also provide a home for the harmless *Kabaragoya* (Monitor Lizard), which keeps down the population of poisonous snakes by eating their eggs - the recent proliferation of vipers in the Welikada area owes much to the depletion of the *Kabaragoya* population. The waterways, if kept reasonably clear of weeds, allow fish to breed in them. This not only provides a source of protein to the poorer people in the area, but also controls the mosquito population, because the fish eat the larvae.

We have seen how the pollution of the Beira Lake (itself about a third the size it was a century ago) and its connected system of waterways has done away with much of the wildlife that inhabited it of yore. Even the former bird sanctuary on the island in that section of the Beira opposite the 'Gangaramaya' temple is now a concrete excrescence, ecologically and aesthetically unappealing.

"Truth is Concrete"

This brings us to the another objection, that of art. As Colombo has expanded, it has produced more and more of those horrible ferro-concrete and glass commercial buildings, combined with unimaginative concrete, brick and asbestos (with roofing tiles added) housing for the affluent (complete with 2-3 mere parapet walls). At the other end of the scale lie the ugly multi-storeyed shop buildings with inadequate sanitation, unhealthy eating houses, smelly concrete flats for the lower-middle class and little breeze-block and asbestos slum dwellings (if not adobe and tin-sheet shanties) for the lumpen proletariat.

Gone is the old garden city, with its thick-walled Dutch-style housing and arcaded British-style commercial buildings, with its boulevards liberally interspersed with trees. Instead we have a concrete and asphalt jungle, where even the ocean breeze turns hot under the glare of the vehicles and buildings and the cloud of pollution hanging over the city. We have opulence living side-by-side with the sordid filth of the lucrative markets of the Pettah, Panchikawatte, Kotahena and Maradana. Behind the superficial splendour of silly-hatted High Court Building on Hulftsdorp hill lies the muck and mire of Old Moor Street and Wolvendhal.

At the very centre of the Megalopolis lies the ostentatiously -named *Janadhipathi Mandiraya* (Presidential Palace). The English colonialists might have been improper in their dealings with us natives but they were possessed of a sense of proportion: they called the building 'Queen's House' (or "King's House', depending on the sex of the Monarch). Lying to the North of this imposing building is 'Gordon Gardens', left by Major Gordon 'in perpetuity' to the people of Colombo. This little piece of public property, containing the historic 'ISOS' stone of the Portuguese, is now inaccessible to the citizens of the city. It is symbolic of the manner in which public open space has been occupied. Similarly, Galle Face Green has shrunk, to become Galle Face Brown and the public open space of EW Perera Park at Welikada has become the background of the dual-carriageway of 'Sri Jayawardenepura Mawatha'.

The argument might be raised that this viewpoint is sheer Luddism, the opposition of progress for the sake of opposition to progress. However, it should be pointed out that the Luddites smashed machines for a reason: they were being deprived of their livehood. Similarly, the slaves of Haiti burned down the sugar plantations because the sugar plantations were part and parcel of their slavery. The question is, what is 'progress' if we suffer deprivation of our standard of living, health and culture by it?

This question might be academic, were it not for the fact that alternatives do exist to the unplanned expansion and barbarisation of civic centralisation. The Reith report, alluded to above, gives us some indication of how to stop, or at least slow down, the process of urban decay in the GCA.

The late President Premadasa was limited in his ability to conceptualize abstract ideas. He was something of a Hegelian, in that he believed that 'truth is concrete'. This is possibly why he built so many concrete structures. His very practical mind led him to copy many concepts, which proved to be failures outside the context of their original application: the concrete pedestrian overpasses (copied from Singapore) are a case in point.

Nevertheless, in his pragmatism, he laid the germs of ideas that are useful in considering the solution to the problems of Colombo. The *Gamudawa* (village reawakening), 1.5 Million Houses and 200 Garment Factories programmes might, if thought out to the fullest, have provided answers to many of the problems of the GCA and to the island as a whole.

Rural Housing

It should be recognized, first of all, that Sri Lanka is one of the most densely populated countries in the world. The bulk of our population is tied to agriculture. Given the fixed land area that can be dedicated to agriculture, we find an excessive labour force in that sector of the economy. This has even become a problem in the plantation sector, where high labour costs contribute to an uneconomic cost of production.

In the traditional small-holding agricultural sector, the average land holding is below 0.4 hectares (1 acre). The problem is compounded by the fact that fragmentation of land is such that several fields may be far apart from each other. This reduces the efficiency of the peasant farmer. Ideally, the average holding (that allowing for self-sufficiency) should be 0.8-1.6 ha (2-4 acres), in a single piece. This would enable a sufficient capital outlay to be made to give an economic return.

The problem of burgeoning population makes this ideal situation virtually impossible, if the excess labour force is not siphoned off. The population is projected to level-off at about 27 million (about 1.5 times the present population) around 2040. In order to prevent pressure on the land, it would be necessary to accommodate more than this increase in non-farming areas.

The solution to the dual problem of urban over-crowding and rural under-development lies in extending industrial and commercial development to the countryside. This must, however, take place in a planned manner. *Gamudawa* often produced 'reawakened' villages in the wilderness which lost their populations over a few years, because there was no source of income for the labour force. For instance, there is a 'ghost town' in Walallawita, built in 1980, which does not even have the clock in its clock tower; its houses are empty, the shops are closed. Not even the Bank of Ceylon branch so ceremoniously opened is still functioning.

Our town-and-country planning is skewed, such as to amount to no planning at all. The 'township' of Girandurukotte is one example: a scattering of administrative buildings and markets in the midst of an agricultural area. At the other extreme is the gigantomanic development of Colombo. In between are the sites of the annual *Gamudawa* festivals, with their non-functional copies of Parliament and of Adam's Peak: the buildings are utilised as offices for bureaucratic agencies (when not occupied by cattle).

The 1.5 Million Houses and the 200 Garment Factories programmes supplemented the *Gamudawa* project, together with the *Janasaviya* programme, but these never really inter-meshed in a planned manner. Indeed, they appeared more and more as pure propaganda exercises for the ruling regime.

A *Gamudawa* township in an agricultural area should have combined administrative facilities with utilities-storage and transshipment areas for produce, distribution points for agricultural inputs, health-care facilities (for humans, livestock and crops) and factories to drain off excess labour - and with improved housing and transportation for the residents of the area. Unfortunately, such a solution requires micro - as well as macro-planning.

Solution

The solution proposed here is the draining-off of the population of the more densely populated areas to those of a lower density. According to the 1981 census, the average population density of Sri Lanka as a whole was 230/ sq.km. Of the 24 districts existing at the time (Kalmunai and Killinochchi were created subsequently) 14 had population densities lower than this median. For purposes of comparison, table III gives the relevant data for the seven most and the seven least densely populated districts..

It is clear that the aggregate population of the least densely populated areas could be tripled, without the overall population density approaching the islandwide norm. However, the less densely populated areas have large tracts of agricultural and virgin land. It is essential to prevent the dissipation of the former and ecological damage to the latter. Therefore, the increase in population should be confined into as small an area as possible. There are several areas which have been designated as unsuitable for agriculture, which might be utilized in relocating the population by the creation of new towns..

It should also be noted that in 1981 (the last year for which reliable housing statistics are available), only 42% of houses were classified as 'permanent'; the rest were basically shanties. The building of new towns would tend to increase the stock of non-shanty housing, as well as reducing overcrowding.

The ideas that follow draw heavily on the proposals of Ebenezer Howard and on the Reith Committee recommendations. Obviously, as these were intended for an advanced industrialized society, they need to be adapted to the circumstances prevailing in Sri Lanka. However, the basic ideal of a healthy, integrated and self-reliant urban community remains.

The Reith Committee recommended a population of 25,000-50,000 for a new town, on the basis of a gross population density of 3,000 per sq.km, surrounded by a 'green belt' of a kilometre in width. It would be served by an adequate communications network and would comprise areas of industry, commerce and agriculture. Thus, a new town with an optimum population of 35,000 would occupy an area of 12 sq.km, surrounded by a 'green belt' of about 15 sq.km. Adapting the same idea to Sri Lanka, we should think in terms of an average town with an eventual population of about 35,000 people, occupying about 30 sq.km of land. This figure fits in with statistics for services (as of 1981), as outlined in table IV.

Planning New Towns

This scheme allows for a new town containing a General Hospital of over 100 beds., over 20 schools, a main post office and about seven sub-post offices. The town would contain several nodes, which could be delineated by the services available. The primary node would be the town centre, containing administrative offices, the hospital, the main post office and the commercial centre and would be the main transport node (with bus station and/or railway station). It would also contain the Central School, the urban playing field, the main park, the main public library and the urban auditorium.

Table -III

Rank	Distric	Population (1000)	Area(sq. km)	Density (persq. km.)	Population at median density (1000)
01	Colombo	1,699	652	2,605	150
02	Gampaha	1,391	1,399	994	322
03	Kandy	1,048	1,891	554	435
04	Kalutara	830	1,607	516	370
05	Matara	644	1,247	516	287
06	Galle	815	1,674	487	385
07	Kegalle	685	1,663	412	382
Total of first	seven	7,111	10,132	702	2,330
24	Vavuniya	95	2,645	36	608
23	Mullaitivu	77	1,966	39	452
22	Moneragala	274	5,587	49	1,285
21	Mannar	106	2,002	53	460
20	Polonnaruwa	262	3,404	77	783
19	Anuradapura	588	7,129	82	1,640
18	Amparai	389	4,539	86	1,044
Total of last	seven	1,791	27,272	66	6,273

(Source: *Census of Population and Housing 1981, General Report)*

The secondary nodes would be the centers of the 'neighbourhoods' or urban wards. These could be based on a sub-post office area (comprising two postal delivery areas), with three schools each. The secondary node would be the neighbourhood shopping area, including the local *grama sevaka* office, the community centre, the branch library or reading room, the infant day-care centre, the local park and playground, and the bus and taxi stand.

A neighbourhood would eventually contain 4,000-6,000 people. On the present average household size of approximately five, each would require about 1,000 houses, apart from the commercial and community building. A new town as a whole would require about 7,000 houses. Packed at the recommended population density of 75 per hectare, the residential areas would take up about 0.07 ha (or about 25 perches) per dwelling.

Table -IV

Service		Number of Units	Population Served
Hospitals		386	38,463
	Beds	42,902	346
schools		9,789	1,517
	Primary	4,673	3,177
	Secondary	4,848	3,062
Post offices		3,520	4,218
	main	422	35,182
	Sub-post offices	3,093	4,800
	Delivery areas	5,939	2,500

(Source: *Census of Population and Housing 1981, General Report,* and *Central Bank Review of the Economy*, 1987)

The secondary and primary nodes would not merely be connected by public transport and highways, but also by bicycle paths and footpaths. The secondary nodes should be easily accessible by foot to the residents in the neighborhood it serves.

The industrial parts of the town should be segregated from the areas of residence and services. However, they should be in close proximity to the transport media, as well as to the commercial areas, but should be easily accessible to the commuting work force and to the transportation points for incoming materials and outgoing products. The planning for new towns cannot be dictated by the needs of ten years ahead; it must adapt to the likely course of population growth and societal change over the next half-century. Between today and the mid-21 st century, it would be necessary to relocate about 14 million people in the new urban areas. At an average town size of 35,000 people, this would require about 400 new towns. These would occupy an area (including 'green belts') of perhaps 11,000 sq.km.

The population of a new town can be expected to stabilize in between 35 and 15 years (according to how close its construction is to the projected year of population stability). Assuming that the population does stabilize around 2040, we have about 30 years to locate, plan and build the new towns. On average, this means commencing 13 new towns per year. Of course, over a 30-year period, it is possible to plan to gradually increase new town development, then to gradually decrease it as population stability veers close.

The cost of a basic new town would total about Rs. 10 billion (based on 1994 costs). However, since the initial growth would be concentrated into the first ten years, the annual cost in the first decade could be estimated at Rs. 750 million per town. This figure is based on the annual construction of about 500 houses and the equivalent utilities, per town. It should be noted that all buildings should be planned on expandable modules, to take into account population growth,. For example, the average dwelling could be erected based on an occupancy of 3, expandable to an occupancy of 5 later.

The rate of construction could be related to the rate of economic growth. For example, if we assume an annual GDP growth rate of 6% the rate of initiation of construction would be 8 towns per annum in the first year, rising to 14 towns per annum by the 10th year. Thus, the annual cost would increase from Rs. 6 billion in the first year to Rs. 11 billion in the tenth year. The rate of town construction would tend to taper-off after the 15th year.

It behoves the planners to site the new towns in proximity to one-another, to prevent environmental damage, as well as to reduce the logistical costs. The most efficient form of land transport is rail, so the new towns could be located along the axis of railway tracks. Assuming the average new town to be circular (for an exactly circular town, 30 sq.kms yield a diameter of about 6 km.), the town centers could be located at a minimum of 6 km from one another, which would allow for an intervening 'green belt' of about 2 km.

Let us take, as an example, the Moneragala district. Table III shows that, at the islandwide median population density of 1981, there is room for over 25 new towns in this district. Now, the state has announced that it will extend the South-coast Railway to Kataragama. The logic of railway operation leads to the connection of incomplete loops. Thus, it stands to reason that the Kataragama line should connect up with the Up-country Line to Badulla and the East Coast Line to Batticaloa. If the old Kelani Valley line were to be reestablished as far as Opanaika (its original terminus) and connected with the Kataragama Line, there should be a total of well over 150 km of track running through the Moneragala district.

If a series of nodes were established along these railways, centered on 6 km diameter circles, there would be more than 25 such nodes within the Moneragala district.These could serve as the basis for new towns, with an eventual aggregate population of almost a million. The proximity of the new towns would aid in increasing the efficiency of rail transport, while the improved services available would tend to uplift the living conditions of the surrounding population.

This logic could be extended to the other areas mentioned in table III, as well as to the less densely populated parts of the seven other districts with less than the norm for population density (Trincomalee, Batticaloa, Hambantota, Puttalam, Matale, Badulla and Ratnapura). The track of the railway line could be partly dictated by existing townships, which might be usefully incorporated into the new towns.

Employment Needs

Of course, it is all very well to establish new towns, but what abut employment for the residents? The labour force at present is comprised of about a third of the population (*vide* census reports of 1971 and 1981). The 'active labour force' of the proportion 15-59 is between 50 and 60 percent. So, as the population of youth declines, the proportion of the labour force increases. This tendency is sure to be accelerated in new towns.

Part of the need for employment can be catered for by the state sector (in administrative and public service jobs - teaching, healing and so on). The private service sector (shop, bank and office employees and transport workers, as well as workers in the repair and maintenance fields) would account for more jobs.

Of course, a goodly proportion of jobs could be provided in utilities, such as supply of water and electricity. Additionally, the disposal of waste could generate additional employment. If each town had a well-planned sewage and waste-removal system, it could provide organic fertilizer, power and gas to the residents. Sewage treatment can provide cooking gas for about 10% of the population, more if animal and vegetable wastes are added; the by-product is high-grade fertilizer. Domestic waste can be sorted and either fed into the sewage disposal system or to a power-generating incinerator.

However, the bulk of employment should be created in the productive sector. For each town of 35,000 people, about 5,000 jobs would have to be provided in the productive sectors. Indeed, part of the 'green belt' around each town could be devoted to agriculture, providing employment for some of the town dwellers. However, it would be up to the state to either provide industrial employment or to attract industries that would do so. The industrial estates in each town would have to be planned with this in mind.

Garment manufacture is only one such industry. There are potentially many others, including those which utilise locally available raw materials and skills. Agricultural products provide opportunities for establishing processing industries. Wood from tree plantations can be processed for furniture. Part of the waste wood could be used in papermaking, as can rice straw. Rice husk (*dahaiyya*) is, at present, almost totally unutilized, but oil can be extracted from it, the residue being used as a fuel, like sawdust in briquette form.

Downstream and "green belt" agricultural activities could include the four-field rotation of crops, with legumes (soya or *dambala*), tubers (manioc or sweet potato), grain (rice or millet) and fallow, in succession. The legumes would provide vegetable protein supplements, the tubers, starch. These crops could also be processed to provide low-cholesterol oil and (in the case of tubers) industrial alcohol. The wastes would go towards increasing the bio-mass available for energy and fertilisation purposes. This agro-processing would provide additional employment.

There is the prospect of industry on the basis of processing the more traditional plantation products. The blending and packaging of tea, for example, could be decentralised from Colombo to the new urban areas. The manufacture of rubber goods could also be expanded in these areas. There is also the possibility of building industries based on mineral products. It is almost an adage that we have no mineral resources, but this truism is false; we overflow with them. We have simply failed to exploit them.

For instance, Meegahatenna has some of the highest grade graphite deposits in the world. In the last century, Meegahatenna was the centre of graphite, such that one of the most famous *pathal kavi* (miners folk songs) emanated from the area. Since the exhaustion of the superficial graphite, no attempt has been made to develop deep- lying strata. No attempt has been made to create processing and subsidiary industries for these deposits. Graphite is used as a lubricant, as a liner for refractory tools, as an additive for cast-iron production, as 'lead' in pencils, in dry-cell battery production and in industrial composite materials.

At Pulmoddai and Induruwa we have high grade deposits of ilmenite. We have yet to establish a plant to refine these mineral sands to their high-value components of Titanium, Zirconium and Beryllium. In Randeniya are deposits of Magnesite and in Kurunegala, extensive deposits of Mica, both electrically insulating materials. In the south-west quadrant there are superficial deposits of iron ore, while the Seruwila area has deposits of iron ore and copper. In the Puttalam area, there are shales which can be refined to produce aluminium.

A good example of the state's apathy is given by its attitude to ceramics. There used to be a ball-clay plant of the Ceramics Corporation at Kalutara, which exploited the ball clay deposits at Tebuwana. The local MP raised the interest of a South Korean firm in manufacturing electrical ceramics in the area. However, the state showed no interest in the scheme, being fully involved with the 200 Garment Factory proposal.

This episode is all the sadder because the growth area in ceramics lies in industrial ceramics, not in household crockery and sanitary ware. Recently, there have been tremendous advances in synthetic ceramics, which may be utilized in engines (as cylinder liners and pistons), for example. There are ceramic materials, created artificially in the West, which occur in the natural form in Sri Lanka.

These resources should enable the establishment of new industries in the new towns. Of course, this would require a good transportation network. Given the paucity of land in our already crowded island, the best solution to our transportation problems lies in railways. These are far cheaper than roads, from both economical and ecological viewpoints. The transportation costs of raw materials and finished goods could be reduced considerably by regular containerized train operations.

It is possible to go further: new railway lines require further workshops. If a railway line were established through Moneragala, new facilities would have to be provided to service the rolling stock and the permanent way. This in turn would provide further employment. Indeed, a new town could be established with the sole purpose of servicing the railway, complete with workshops and running sheds.

The development of such a network of new towns could be linked to the development of the ports other than Colombo. Galle could be linked to the Sabaragamuwa and Uva areas, Trincomalee to the broad swath of land running from Vavuniya and Mannar to Amparai. Additionally, the minor ports and inland waterways could be upgraded. This would tend to relieve the pressure on both the Colombo harbour and its congested transport network.

The building of new towns, in a manner broadly similar to that outlined above, would itself enable the urban renewal of the GCA to take place. The migration of economic activity, as well as population, would tend to reduce the premium on Colombo property. It could thus lead to the provision of greater public open space, as well as the development of a leaner and more efficient urban polity. This surely makes more sense than increasing the congestion of the Colombo area by the plan of reclamation alluded to at the beginning of this article.

Vinod Moonesinghe, an Engineer by profession, is a Member of the Kotte Urban Council.

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