# Integrated Planning for Implementation of Post War Development Projects

Design Guide to Development planning for sustainable peace



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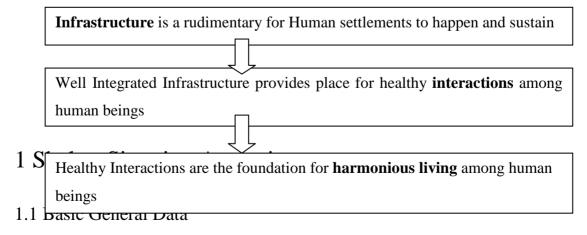
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# Introduction

The study intends to re-visit the designs of the development projects carried out already and new projects that are to be implemented in the conflict area, by CECB architecture unit and find design measures to encourage interactions of ethnic groups.

The study is based on conceptions below:



Sri Lanka is a small island with total area of 65,610 km<sup>2</sup>; inland water covers the area of 2,905 km<sup>2</sup>, and leaves land area of 62,705 km<sup>2</sup>. Natural forests cover area

of 1,421,954 ha, forest plantations cover area of 95,037 ha, and wild life reserves cover area of 314,674 ha. (Central Bank of Sri Lanka, 2008, Department of Wildlife Conservation 2007, Department of Census and Statistics 2007) Climatic conditions varied as temperature ranging from 17° C to 32° C; hence, different geological and climatic conditions prevailed in different parts of the island. Though the island is small, it is biologically much diversified.

The island is occupied by approximately 20 million people with average population density of 322 persons per km², and total annual growth rate of 1.1% (2006) inclusive of 74% of Sinhalese, 12% of Tamils, 5% of Indian Tamils 7% of Muslims and rest of the 2% consists of Burgers and Veddhas-the native tribes. Majority of Sinhalese practice Buddhism, Tamils Hinduism, and Muslims Sunni Islam while both minority of Sinhalese and Tamils are Roman Catholics. (Department of Census and Statistics, 2008) Therefore, the society is diverse in culture, traditions, values, and attitudes.

General Social indicators are comparably very high in the Asian region; life expectancy (2006) is for male 68.2 years and for females 75.8 years, average literacy rate (2006) of 90.8% and poverty head count index (2006/2007) is 15.2. Human development index (2006) is 0.742 and rank among 179 countries is 104. The employment ratios are (2008) in Agriculture 32.7%, Industries 26.3%, and Service sector 41.0%. Income of the people is based on Agriculture 4.7%, Industries 7.2%, and Service sectors 8.3% both public and private arenas. (Central Bank of Sri Lanka, 2008)

Sri Lanka has a parliamentary democratic system of government, where the executive authority is exercised by a cabinet of ministers, presided over by an executive president. The president and the members of parliament are elected directly by the people. For the purpose of administration the country is presently divided in to 8 provinces, 25 districts and 302 divisional secretary areas. The provincial administration is vested in the provincial councils, composed of elected representatives of the people, headed by governor nominated by the central government.

Sri Lanka is a developing country with lower middle level of income (per capita income above US\$ 2,014 in 2008) and economic growth rate in real terms is 6.0% (Central Bank of Sri Lanka, 2008).

# 1.2 Shelter Related Fact and Figures

In general the settlement structure of the country would occupy about 25% of the total lands in minimum. This could go up to 30.0% in the year 2030. This implies that minimum of 86,000 Ha of new lands are needed for settlement development in 2030 because of the addition of 1.335Million housing units by 2030. In 2030 there will be about 5.2 Million to 6.0 Million residential units in the country. With the expected replacement of 5.5 Million of existing housing stock it is projected that approximately 3.5 Million housing units will have to be constructed over a period of 30 years to meet the demand.

In addition to this demand, from 2008 to 2010 approximately 300,000 of people displaced due to the civil war situation. However 240 days after the end of civil war 90% of the Internally displaced persons had been released to returned to their places of origin with more than 28,000 still being in Internment camps.

The national ratio of housing ownership is 80%. The demand for housing is 100,000 units per year. 65,000 people lives in unauthorised lands in forms of slums and shanties. (Department of Census and Statistics of Sri Lanka, 2006) 89% of the households have electricity supply. National telephone density is 71.9 per 100 persons in 2006(Central Bank, 2008). The disparity in Telecommunication services in urban and rural areas is narrowing down, but still the access to internet and e-mail are relatively high compared to other countries in the South Asian region. 84.8% of population has access to safe drinking water of which 35.5% has access to pipe born water in Sri Lanka. (Central Bank of Sri Lanka, 2009). Education is free even at university level.

# 1.3 Housing Policy

Until 1953, public sector housing was limited to lending activities of Housing Loan Board. The first ministry of housing established in 1953 and National Housing Department was former under it. This was empowered to lend for housing and to undertake construction of houses. After 1978, housing and urban development became one of the major investment programmes of the government. In 1979, National Housing Development Authority (NHDA) was established with the objective of accelerating the housing development activities. The NHDA Act

empowered the authority to operate in a much wider spectrum of activities, which included re-development of slum and shanty areas.

However, after 1983, due to the civil unrest of the country, the funds allocated for housing were reduced and diverted towards defence activities, resulting in a drop of housing development activities. As a result, the country's homeless population increased and the government had to change the traditional policy of 'provider' to 'facilitator' approach, resulting in lesser emphasis on direct construction housing programmes. Accordingly, the government launched a housing programme of 100,000 houses to both urban and rural homeless population.

After completion of 100,000 housing programme, Million Houses Programme was implemented during 1984-1988 and revised as the 1.5 Million Housing programme and implemented during 1989-1993. The concept of 'people Participation in the Housing and Community Development programme in slums and shanties' was the main theme of this project.

In 1994, with the change of the government, a policy change has occurred in the urban housing sector. Realizing the need for high density housing in the urban areas with increasing land scarcity, the government gave up the assistant given to the slum and shanty upgrade and initiated a new programme to relocate them in flats built up by the government. The informal and under privileged housing sector of the city of Colombo is about 50% of the total resident population of the Colombo Municipal council limits consuming 11% of the land area. The government had realized that the most of this informal sector occupied areas are very valuable and could be used for commercial developments. Hence as policy, the government has decided to acquire theses lands from occupants and to find alternative locations for them. In this respect, the aim of the government is to sell the acquired land to prospective private sector investors to develop and to construct new multi storied flats by investing the income generated, in reasonably accessible locations.

After 2004 Sri Lankan government focused on Tsunami reconstruction programmes to provide housing for tsunami affected people in coastal areas. This was implemented with the help of donor agencies, private sector developers and NGOs.

# 1.4 Actors in Shelter Delivery and their Roles

### 1. National Housing Development Programme

The objects of the National Housing Development Authority (NHDA) include the alleviation of the housing shortage, the clearance and re-development of slum areas and, making land available for housing development.

### 2. Sustainable Township Programme

Another state housing initiative has been the STP, under the purview of the ministry of housing. The objective of the programme is to house the approximately 66000 slum and shanty dwellers in Colombo while at the same time releasing prime land occupied by such dwellers for development purposes.

# 3. Housing Programmes by the Ministry of Fisheries and Aquatic Resources.

Numbers of housing schemes have been initiated since 1970s to assist fishing communities.

# 4. Mahaweli Development Scheme

This is the largest resettlement scheme in the country. A large proportion of the displaced due to Mahaweli Development projects have been relocated in the Mahaweli area.

### 5. North East Housing Reconstruction Programme

The NEHRP has been implemented with World Bank support in January 2005, to provide housing assistance to conflict- affected areas of the North East. The programme is to be implemented for a four year period in eight districts of the North East and the basic beneficiary selection requirements are that the:

### 6. Rehabilitation of persons, properties and industries Authority.

REPPIA established in 1987, provides assistance in the rehabilitation of persons and properties affected by civil commotion, terrorist activities or political violence.

### 7. Tsunami Housing Reconstruction Unit

This has been established under the purview of the Urban Development Authority to deal with post – Tsunami housing needs.

### 8. Uthuru Wasanthaya Programme.

This programme was established under the Ministry of resettlement and disaster relief services to develop North and East area of country destroyed due to the war situation. Housing settlement planning, Infrastructure development projects, and other mass scale development activities have been implemented under this.

Mainly above mentioned government agencies take main part of housing development with the support of donor agencies, NGO s and private sector developers.

### 9. NGOs and Private developers

There are many NGOs' providing housing for the people and private developers doing housing development for middle income and high end customers.

# 1.5 Relationship among actors

NHDA is the overall leader in the housing industry, they provide more or less provides guidelines, laws and policies related. NHDA provides affordable housing for the poor and middle income portion of the society. The other actors will follow the guidelines of NHDA but more active in respective areas.

# 2 Organisation

The Central Engineering Consultancy Bureau (CECB) is a semi government organization in Sri Lanka was founded in 1977 as a statutory organization, to cater to the growing need for multi-disciplinary consultancy service, in Sri Lanka. CECB provides wide range of services; such as consultants in Architectural, structural and all other in-house services for buildings, infrastructure consultants on transport sector engaging in design and building of highways, roads, bridges; consultants for mega projects such as ports, hydropower projects and irrigation projects, township planning and master planning for mega infrastructure projects, etc. (Source: http://www.cecb.lk)

The organization has a wide experience in designing and construction of all types of buildings from the simple to complex and entire townships. Its role varies from project identification and planning, detailed designing, implementation to completion.

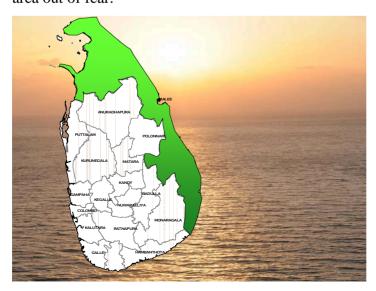
CECB is named as the "service provider" of "Uthuru Wasanthaya" (the reawakening of North and East) reconstruction programme. The CECBs' scope of work is to develop the public physical infrastructure in conflict affected area.

# 3 Shelter Problem

# 3.1 Background of the Shelter Problem

30 years of brutal war ended in 2009 which resulted loss of human life, physical property, and moreover, the loss of mutual compassion, respect, trust, and ethnic harmony among three major nationalities; namely, Sinhalese, Tamils, and Moors who live in this small island country of Sri Lanka. The war segregated these three communities physically as well as mentally while creating unfathomable boundaries among each other.

The majority of Tamils restricts themselves physically to North and the East part of this small island while Sinhalese, Moors and other small ethnic groups live in rest of the country. With the increase of war situation the minority of Sinhalese and Moors lived in North and East were also chased away or moved out from the area out of fear.



3.1 Sri Lanka map. North & East highlighted in colour

Thus, people in the North and East of the country lived 30 years without sharing anything with rest of the people in the country, especially with the majority Sinhalese. Moreover, their younger generation has never known the other communities living in the country except the armed forces and the false picture given by the propaganda machinery of the terrorists.

The 30 year old Tamil person who lives in the area has no experience in cooperating or tolerating a Sinhalese or a Moor or any other race living in Sri Lanka. The people in the area are less likely to tolerate any other s' culture, religion, and attitudes other than what they were used to; simply because they have already lost the inter-actions for over three decades. When one side shuts down the communication, naturally the other side too, goes off resulting low level of mutual trust between the ethnic groups.

Now the war is over and time to build what is lost in the war.

Government of Sri Lanka (GOSL) is encouraging displaced people to resettle in their own lands of origin with INGOs' financial support. GOSL is focusing on implementing the development projects in accordance with the National Physical Planning Department (NPPD) and acts more or less as a facilitator in the settlements issue. GOSL is more attentive to provide infrastructure facilities that are receptive to attract investors, new income generating ventures, migration from other areas, encourage commuters etc.

# 3.2 Organizations' role in Shelter Problem

At this important moment of the country, CECB is entrusted with consultancy and construction of most of the infrastructure development projects in the North and East. The projects are in accordance with the approved National Physical Plan for the country. Among those projects there are schools, hospitals, health care centers, universities, police stations, market places, roads, bridges, irrigation projects, mini hydropower projects, recreational centers, playgrounds, stadiums, swimming pools, auditoriums, theatres, vocational training centers, government administrative buildings, courts, etc; either new or renovations.

### 3.3 Shelter Problem

However, projects are to be designed, planned and implemented individually in a hurry, not in a holistic manner although all happens within the same organization, (CECB). Buildings are completed and functioned but unsuccessful to integrate into the human activities. This will only create un-inviting, non pleasing and uncomfortable spaces around. The new built environment is rather discouraging the inter-actions of the people, unable to attract people to migrate to the area, new investors etc...

One reason, there is no guideline to follow except for building regulation. This is an opportunity that architecture and built environment can enhance, encourage and influence the interactions of communities. Built up space is capable of changing human mind & body activities in an intangible way. Therefore, author intends to prepare a guideline that each of the different types of buildings, infrastructure projects planned in integrated manner.

### Summary - Shelter Problem

The lack of integration of development projects into urban planning of the area creates un-organized, uncomfortable, and unfriendly environment which discourages human interactions.

# 4 Proposal for Change and Improvement

A design proposal to develop entire areas instead of developing individual plots of land will be given as the change proposal complying with national physical plan of the country.

The methodology for the change proposal is a case study method. One of the administrative districts from the North is selected where CECB is entrusted to do several building projects as well as some other infrastructure developments.

# 4.1 Proposed changes within the Organization

This requires re-organize the staff of CECB.

- 1. Top management heads the team.
- 2. Appoint a team leader to coordinate with relevant organizations in the development process.

- 3. Formulate a separate group to work on projects in North and East
- 4. The group will consist of professionals of various disciplines; Architects, Engineers (structural, civil, E&M), urban & town planners, social scientists, environmental professional, surveyors, quantity surveyors, project managers etc.
- 5. The group will have three leaders to work on technical, financial and social issues.
- CECB can come to an agreement with GOSL to develop whole area (influenced by the SDD site visit made on 23 February 2011 to Ayala Nuvali mixed development site)

# 4.2 Actions to be taken within Architecture Unit of the organization

- Appoint a team leader for all development projects in North and East area.
   Responsibilities will be co-ordination with other professionals, group members, who are responsible for each development.
- 2. Lobby for suggestion for improvements & Coordinate with relevant authorities
- 3. Maintain a central data base at CECB Architectural Unit. Data will be accessible to anyone who is interested with the official permission of the top management of CECB. The data base will serve for the organization for the design development projects; identify development potentials, to develop financial proposals, etc.

Data base will consist of demographic data, projects under the scope of CECB and other projects proposed by national physical plan, Data base of existing infrastructure of the area, present developments which are ongoing, and future planning proposals by GOSL, Data base of all relevant actors in the area, Data base of maps, including the existing settlement & proposed settlement areas, data of demography, environment, climate etc, Data base of design of Individual Houses to be built by NGOs' donations by Government of India (GOI) etc, Data base of GOSL vision and polices for the area etc.

# 4.3 Development guidelines

- 1. Access, connections, linkages etc. Access roads to be total 40 m wide (for motor vehicle transport, and rest for cycle path, pedestrian path and green belt separating each pathway) and 3m reservation from both sides for future expansion.
- 2. Electricity supply lines, water, fire, and sewer lines underground. Accessible without disturbing day today transport.
- 3. Waste management plan
- 4. Theme for development-Environmental friendly
- 5. Set up rules regulations for total development
- 6. Energy saving, use of renewable energy, green concepts etc.
- 7. Open space policy, recreational areas etc. lobby for changes in land use policy. At present 80% of land is buildable. Increase of open area need to be increased.
- 8. Respond to the context. Theme guide for appearance. Architectural cohesiveness to the context, buildings that relates to other infrastructure, linkages to other structures and infrastructure (Create gathering spaces, provide accesses, to reach the adjacent cities; Suggest activity areas, commercial development along major access way)
- 9. Lobbying for land policy changes, financial issues
- 10. Development policy, such as mix development.
- 11. Zoning (may require re-zoning)
- 12. Optional housing development

# 4.4 Proposed changes outside the organization

- 1. Lobbying for suggested improvements to the projects with the support of top level management of CECB to gain political support.
- 2. Suggest new projects that CECB can venture into.
- 3. Group discussions, coordination, among different teams of relevant authorities, especially with the national physical planning department
- 4. Lobbying for support from professional institutes
- 5. Encourage open discussions on development projects

# 4.5 Limitations at present

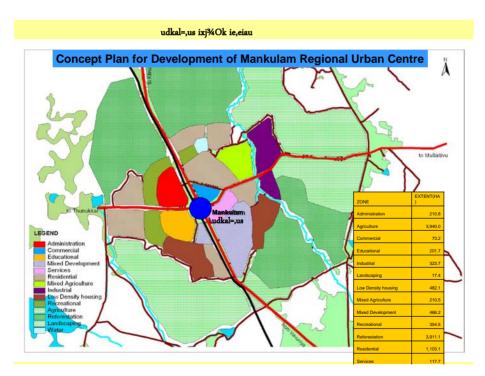
CECB's scope in the process of implementation of guide lines are limited to the project premises at present.

# 4.6 Changes Project case study

Development area-Mankulam



Source: national physical planning department



Source: national physical planning department

Development projects by CECB in this area are

- 1. Development of main roads and by roads
- 2. Proposed improvements to police station and police academy
- 3. Residential buildings for police officers
- 4. Residential buildings for government officials
- 5. Improvements to school buildings
- 6. Improvement to hospital
- 7. Improvements to courts building and residential buildings

Case study-improvements to police station and police academy-Mankulam





Proposed police station is located in proposed administration area. The development includes residential quarters for the officers in different ranks.





The development includes well designed sports ground, indoor stadium and pavilion, and Training center too.





This project is selected as the case study -1 as this is major administrative function where people have to interact with. And this would be a good start. We will revisit the designs already done and will make it to comply with design guidelines formed for the area.

And we need the political and administrative officers' support to implement some of the guide lines.

### 4.7 Evaluation

The evaluate success of integration of individual development project with other and existing projects of the area. This will be assessed by the number of human usage/interactions after the improvements. (SWOT analysis). But this will be a minimum of 3 years after the implementation of development projects in total.

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