

Sri Lanka

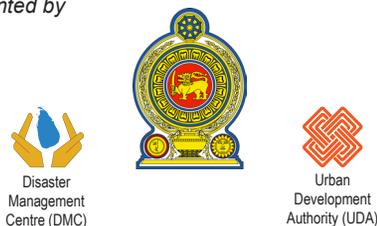
Integrating Hazard Risk Information into Kanthale Urban Development Plan, Sri Lanka



A Priority Implementation Partnership (PIP) between the Disaster Management Centre (DMC), Ministry of Disaster Management and the Housing planning, construction and approval agencies in Sri Lanka

Under the Regional Consultative Committee on Disaster Management (RCC) Program on Mainstreaming Disaster Risk Reduction into Development in Asia.

implemented by



with support from





■ Urban development in Sri Lanka

Sri Lanka is experiencing a rapid growth in the urban population in par with global urbanization trend. The estimated average urban growth rate is three percent per year during 2005 -2015 period. The present urban population is around 30 percent and more than half of the country's population will be living in urban cities by the year 2016. Development that took place during the last two decades has significantly changed the urban environment in the country. Demands for lands that arise from population increase, expansion of industrial activities, growth in commercial and service sectors and the need to preserve the fast dwindling environmentally sensitive lands for future generation is a priority for urban development planning.

The pace and magnitude of this urbanization means that the policies and strategies should be in place to ensure safe and sustainable urban development and to minimize growing poverty in cities, improve accessibility to basic facilities for the underserved settlements in urban areas as well as reduce the growing risk urban areas are facing from increasing hazards. Therefore, disaster risk reduction (DRR) measures need to be incorporated into development planning processes in urban areas.

Source: Department Census & Statistics, 2008.



■ Urban planning in Sri Lanka

Urban Development Authority (UDA) Law No 41 enacted in 1978, is a land mark in the history of town planning in Sri Lanka and, different from the previous legislations. The Law established the Urban Development Authority to promote integrated planning and implementation of economic, social, physical development of areas declared as urban in the country. The Law provides the legal provisions to declare any Area as “Urban Development area” by order published in the gazette under section 3, and bounds of such areas. The Urban Development Authority thereafter is responsible for better physical and economic utilization of that Area.

The UDA law has wide powers for promoting as well as regulating development in areas under the UDA law no 41 of 1978. According to Section 3 of UDA law no 41 of 1978 (1) “Where the Minister is of opinion that any area suitable for development, the Minister may, by order published in the Gazette, declare such area to be an Urban Development Area.

With the primary task of the UDA to develop declared areas for better physical and economic utilization, the Authority is provided with powers to approve, coordinate, regulate, control or prohibit any development activity in such areas. In order to promote and regulate integrated planning and physical development of land and building, the key planning tool used by UDA is the “Development Plan”.

The Urban Development Authority is also involved in providing consultancy services to Provincial Councils, Local Authorities and other organizations with regard to urban planning and development issues, maintaining a land bank to meet the needs of development as well as the requirements of local and foreign investors formulating and submitting development plans, including capital investment plans. It is also involved in undertaking and executing development projects and schemes and formulating and implementing the urban land use policy, developing environmental standards and preparing schemes for the environmental improvement of urban areas, management and maintenance of property developed by UDA.

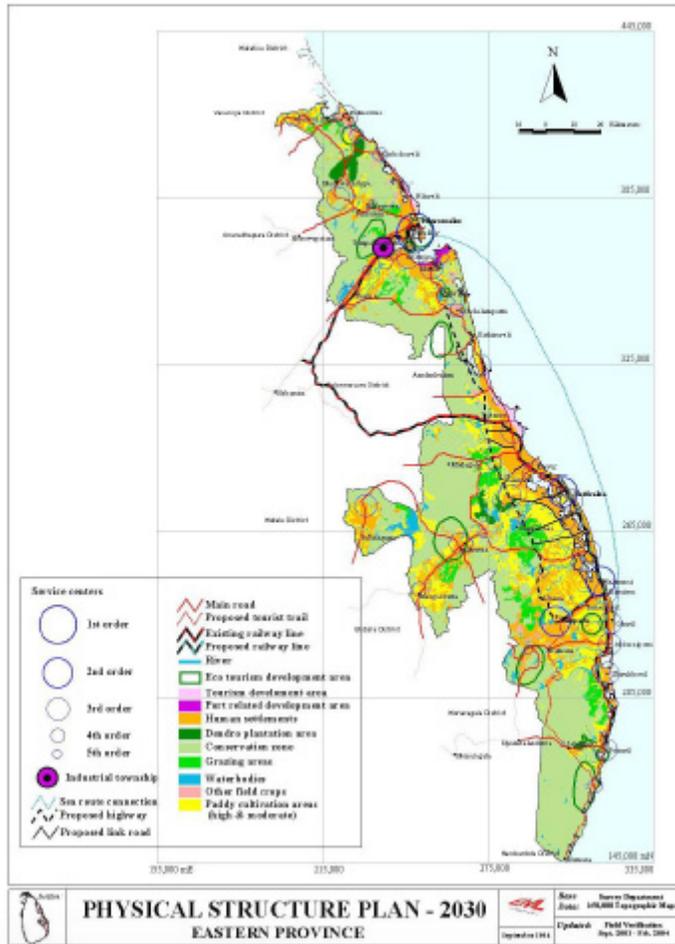
TABLE 1. URBAN DEVELOPMENT AUTHORITY DECLARED AREAS IN SRI LANKA

	Municipal Councils	Urban Councils	Pradeshiya Sabah's
Local Authorities	18	42	270
Declared Areas	18	42	155
UDA Development plans to be prepared	04	22	144

Source: UDA, 2010



Map 5-1 Physical Structure Plan for the Eastern Province by 2030

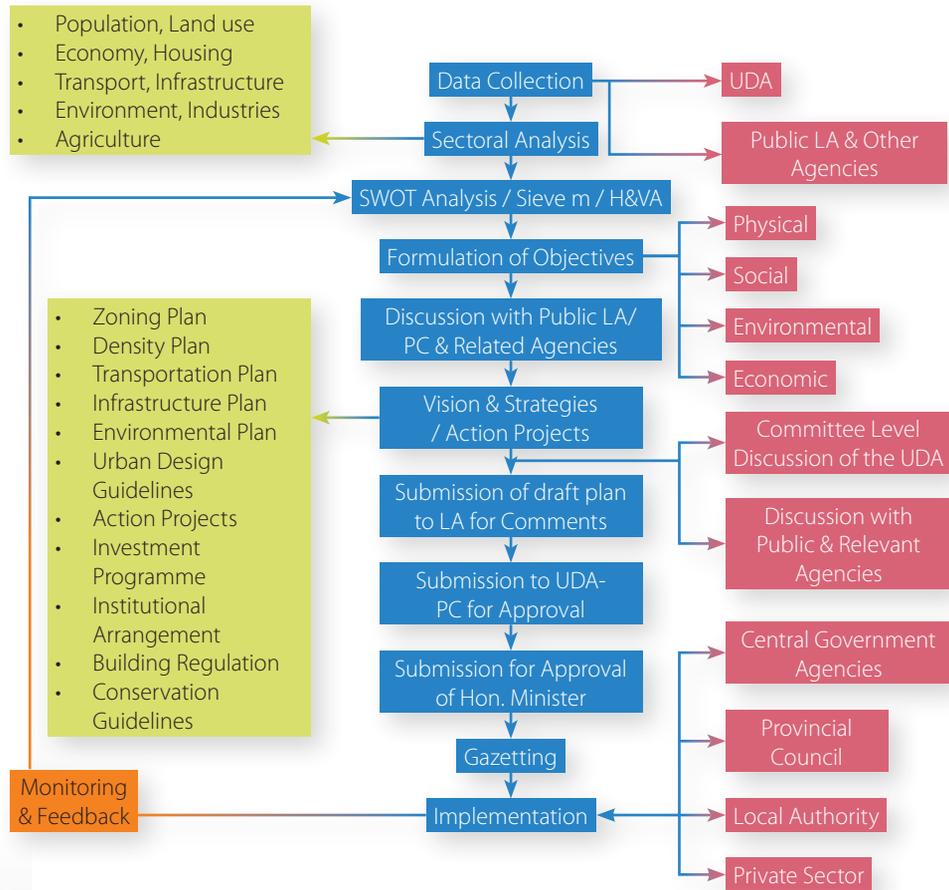


The above local authorities and declared areas which fall within one kilometre of the coastline around the country have been brought under UDA Law No 41 of 1978. So far Government of Sri Lanka has gazetted 41 detailed development plans and enforced the rules and regulations in the areas declared under the UDA law. Previously, Local Authorities were not identified as planning authorities in Sri Lanka. However, the recently gazetted National Policy on Local Government (NPLG, 1632/26-18/12/2009) identifies the Local Authorities as Planning Authorities at local level (Section 4.1.4 of NPLG). However, under the UDA law Urban Development Authority hold its powers for supporting major local developments in local authority areas declared as development areas.





■ Planning methodology for preparation of development plan - UDA



■ Integrating hazard risk information in Kanthale Development Plan

Disaster Management Centre (DMC) under the Ministry of Disaster Management of Sri Lanka which is a member of the Regional Consultative Committee on Disaster Management (RCC) has been implementing the Priority Implementation Partnership (PIP) on mainstreaming DRR in the housing sector in Sri Lanka. Urban planning being an integral part of housing development, the PIP took special emphasis in looking at integrating DRR in the urban planning processes, with an objective of enhancing enabling environment for housing development in Sri Lanka. Thus the multi-agency housing sector technical working group formed under the PIP provided technical support to UDA by demonstrating integration of hazard risk information in the Kanthale Development Plan, which is being formulated by UDA.

Following specific technical inputs were provided to UDA under the PIP:

- Developing detailed hazard map for Kanthale Local Authority area with the consultation of DMC and UDA regional office
- Field verification by UDA and officers from Local Authority at Kanthale with the assistance of officers from DMC





COLLECTION OF HAZARD INFORMATION

- ☆ DMC with assistance of District Disaster Management Coordinating unit in Trincomalee District collected the hazard information. This process was facilitated by the Regional Office of the UDA located in Trincomalee District
- ☆ GIS unit of the DMC obtained the rainfall and data from Department of Meteorology for the last 40 years.
- ☆ DMC obtained the digital data of the Kanthale PS areas from UDA GIS unit. The collected information were analysed using ArcGIS software
- ☆ The following GIS maps were produced by the DMC:
 - Human Elephant Conflict areas
 - Flood prone areas were marked into existing land use maps of the Kanthale PS area
 - Water deficiency with rainfall and water availability of the area
 - Finally these maps were superimposed and land zonation map were developed by the UDA GIS unit
 - The draft maps were produced to the Kanthale PS planning committee for public consultation

- Based on the hazard map complete the land zonation map for Kanthale
- Gazetting of Kanthale UDA development plan
- Awareness raising among staff of UDA on importance of DRR for urban planning and the guidance on incorporating disaster risk information into urban planning process.

The DMC led TWG met regularly and guided the implementation of the above mentioned activities.

One of the main objectives of integrating hazard risk information in the Kanthale urban development plan is to demonstrate the use of multi-hazard risk map as a base map for land use zoning. In the long term this would assist UDA to develop minimum requirements to be adhered when applying and approving the housing construction in specific land zones.

Methodology followed for developing Kanthale Development Plan

- Declared the area as an urban development area under UDA law.
- Prepared the base map with contours and spot heights.
- Prepared situation report including physical, social, economic, and environmental aspects
- Identified existing land uses and ongoing, proposed projects/programmes for the area.
- Collected hazards and vulnerability information with stakeholders and community.
- Identified the type of main hazard such as drought, flood, cyclones, human-elephant conflict, dam breach (Kanthale Tank) with relevant parties and community.
- Mapping out of areas affected by identified hazard.
- Prepared zoning map with permissible and prohibited uses.
- Prepared draft development plan.
- Draft plan was submitted to the stakeholders, community and local political Authority.

Once the plan was developed it was submitted to the local authority officials of Kanthale for their comments and observation before submitting to the main Planning Committee at UDA and the Board of Management for approval. It was translated into Sinhala and Tamil and submitted to the Honourable Minister and gazetted in all three languages. Simultaneously a training and awareness raising program was conducted for around 100 physical planners from UDA on "how to mainstream disaster risk information into development plans of UDA". Awareness raising was also undertaken for stakeholders, political authority and community at Kanthale.





■ Way forward

Based on the experience of undertaking this demonstration project, UDA has requested DMC to assist in integrating hazard risk information in the development plans for the areas where plans are not yet prepared (refer to table 1). With the limited capacity and the human resources, DMC in consultation with UDA has prioritised the development plans for which they would be involved in providing technical support (see box below). It is in the process of developing multi hazard maps for land zonation for the following prioritised MC's and UC's in the country which will be completed within the next six months period with the assistance of UDA regional offices in respective areas.

1. Kalmunai Municipal Council
2. Akkaraipattu Municipal Council
3. Bandarawela Municipal Council
4. Batticaloa Municipal Council
5. Eravur Urban Council
6. Balangoda Urban Council
7. Mannar Urban Council
8. Gampola Urban Council
9. Hatton-Dickoya Urban Council
10. Kalutara Urban Council
11. Puttalam Urban Council
12. Tangalle Urban Council
13. Hikkaduwa Urban Council
14. Kuliyaipitiya Urban Council
15. Weligama Urban Council

■ Challenges in integrating DRR into urban planning process:

In consultation with the TWG members, the following challenges have been identified:

- Lack of reliable information on historical data on hazards , which makes it difficult to undertake the hazard analysis
- Not referring to contour maps as it's not in required scale for land zoning
- Overlapping duties among central government institutions and Local Authorities
- Absence of clear-cut duties & responsibilities among local Authority staff and other stakeholders engaged in UDA development planning process. As per the 13th Amendment to the constitution of Sri Lanka in 1987, disaster management was not taken into consideration and therefore, it was not a devolved subject. Therefore, provincial & local level does not give adequate emphasis and importance to disaster management and risk reduction activities under the present legal framework.
- Lack of legal provisions for the construction guidelines. For example, building guidelines for landslide prone areas are not legally backed up by the existing legal framework.
- Political will and commitment for DRR
- Capacity (technical) of the local authority staff on DRR measures
- Lack of legal provisions to incorporate disaster risk reduction measures into development planning process



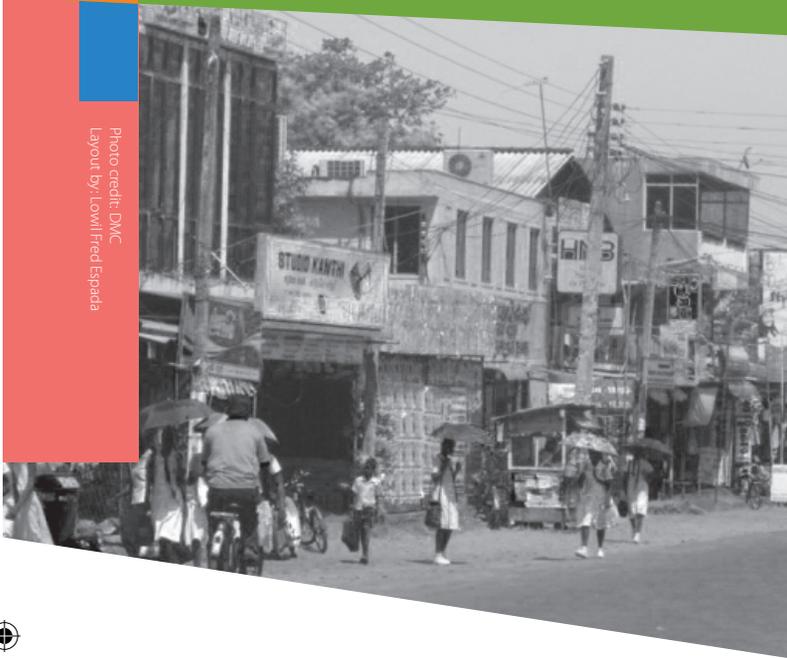


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Layout by: Lovell Fred Espada

Regional Consultative Committee on Disaster Management (RCC)

The RCC comprises of members who are working in key government positions in the National Disaster Management Offices of countries of the Asian region. To date, 26 countries are represented by 30 RCC members from the Asia and Pacific regions, namely, Afghanistan, Bangladesh, Bhutan, Brunei, Cambodia, China, Georgia, India, Indonesia, Iran, Jordan, Kazakhstan, Korea, Lao PDR, Malaysia, Maldives, Mongolia, Myanmar, Nepal, Pakistan, Papua New Guinea, Philippines, Sri Lanka, Thailand, Timor Leste and Viet Nam.

RCC Program on Mainstreaming Disaster Risk Reduction into development Policy, Planning and Implementation in Asia (RCC MDRD)

A key priority identified by the RCC is the integration of DRR into development process. To initiate action on this agreed direction, the RCC program on Mainstreaming DRR into development policy, planning and implementation (MDRD) was launched at the 4th RCC meeting in Bangladesh in March 2004. The RCC 5 adopted the Hanoi RCC 5 statement on Mainstreaming DRR into Development in Asian countries which prioritizes mainstreaming of DRR to be initiated in National development planning process as well as Sectoral development. It identified priority sectors namely Agriculture, Education, Health, Housing and Infrastructure for mainstreaming of DRR. The program has five components for implementation:

1. Partnerships for Mainstreaming disaster risk reduction into National Development Planning processes;
2. Priority Implementation Partnerships (PIP) on Mainstreaming disaster risk reduction into sector development;
3. Advocacy for Building awareness and political support for Mainstreaming disaster risk reduction into development policy and planning;
4. Knowledge management platform for mainstreaming disaster risk reduction: Showcasing good practice and lessons learned; and
5. Capacity development for Mainstreaming of disaster risk reduction into development of national and sector ministries, technical institutes, private sectors and NGOs in RCC member countries.

This case study is a part of series of case studies developed to share the experiences of undertaking Priority Implementation Partnership (PIP) in Sri Lanka on incorporating DRR into the housing sector in Sri Lanka, implemented by the Disaster Management Centre (DMC) under the Ministry of Disaster Management, in partnership with national agencies involved in planning, design and construction and regulations related to housing with technical support from Asian Disaster Preparedness Centre (ADPC), and financial support from AusAID.

For more information, please contact:

Urban Development Authority (UDA) Ministry of Defence

Plnr. I. S. Weerasoori
Deputy Director General (Planning)
Email: indu_weerasoori@uda.lk

D. Hettiarachchi
Director (Landscape Planning)
Email: enscape@uda.lk

Padma Wijesinghe
Assistant Director
Email: wppwijesinghe@gmail.com

Disaster Management Centre (DMC) Ministry of Disaster Management

Major General Gamini Hettiarachchi
Director General
Email: dg@dmc.gov.lk

U W L Chandradasa
Director (Mitigation & Technology)
Email: chandra@dmc.gov.lk

Asian Disaster Preparedness Centre (ADPC)

Arghya Sinha Roy
Program Manager
Email: arghya@adpc.net

Rohan Cooray,
Project Coordinator,
Priority Implementation
Partnership (PIP-SL)
Email: rohan@dmc.gov.lk

