



Country Case Study: Sri Lanka

Mainstreaming Climate Change into Urban-Related Policies



// Image 1. Mirissa Sri Lanka Luftbild © flickr

Sri Lanka has a total population of 21 million people, with only 18.2 per cent of Sri Lankans currently living in urban settlements, according to the 2012 Census. According to the 'World Urban Prospects: The 2014 revision', Sri Lanka is one of the world's least urbanized countries, and by 2050, the nation's urban population is expected to reach only 30 per cent. Certain districts, however, are experiencing rapid urban growth rates of up to 38 per cent¹, putting further pressure on the government to meet its national development targets and to ensure the long-term well being for its citizens.

The South Asian Association for Regional Cooperation (SAARC) countries generally exhibit considerable hidden urbanization that is missed by official statistics, with the level of urbanization thought to be most understated in Sri Lanka. In fact, the Agglomeration Index shows the urban share in Sri Lanka at 47.1 per cent, as per 2010 results. Official statistics of urbanization are based on whether a person is living in a municipal council (MC) or urban council (UC), which may have an impact on accuracy.

Moreover, constant changes to legislation that both define urbanization and set the urban policy agenda have contributed to a poor understanding of the implications of urbanization. Successive Sri Lankan governments have accepted the need for re-examining the existing 'urban definitions' and have put forth proposals that better reflect the country's demographic trends and urban characteristics, but they are yet to be adopted.

In Sri Lanka, urbanization has been confined to a few regions, the most prominent being the Western and Southern coastal belt, with low density urban footprints and linear developments adjacent to the main highways along the coastal belt. Sri Lanka's urbanization can be characterized as an 'urban sprawl' rather than planned urban development. As the population and settlement expansion pushes urban boundaries ever wider, the lack of planning has resulted in ecosystem degradation. Pollution, compounded by lack of planning, inequitable distribution of resources and lack of infrastructure, has resulted in disproportionate impacts among the poorer and marginalized populations.

// ¹Census of Population and Housing, 2012. Online at <http://www.statistics.gov.lk/PopHouSat/CPH2011/Pages/Activities/Reports/SriLanka.pdf>

Colombo, the commercial capital of Sri Lanka, exemplifies the highest level of urban development and the challenges associated with urbanization. According to the Demographic and Health Survey 2006-2007 conducted by the Department of Census and Statistics, 54 per cent of the Colombo city population of 647,100 lived in huts, slums or unauthorized structures designated unsuitable for humans. While there is a demand for housing close to the commercial hubs, supply is hindered by land scarcity, high land values and lack of financing options; the latter especially affecting the low-income groups. These factors have caused financially insecure communities to settle in unsuitable areas including those that are environmentally sensitive and prone to disasters. These settlements have inadequate access to public infrastructure facilities and lack basic urban services such as water and sanitation facilities, drainage and road networks.

Urban Climate Change Vulnerabilities

Sri Lanka's climate is to a large extent determined by its geographic position as an island nation in the Indian Ocean. The country is especially vulnerable to the impacts of climate change such as floods, cyclones and droughts, which are projected to worsen in the near future and which will amplify poverty as well as food insecurity in the country. Its coastal land zones as well as infrastructure sectors are among the most affected in the country. Lack of institutional capacity stemming from limited financial, technical, and human resources further exacerbates Sri Lanka's climate change vulnerability².

Urban challenges are expected to be further exacerbated in the future due to longer-term climatic changes. Some projections on climate change in Sri Lanka predict long-term changes in temperature as well as precipitation patterns. One study sponsored by the Asian Development Bank that covered six countries in South Asia, reported projections made under different Intergovernmental Panel on Climate Change (IPCC) scenarios until 2080 (Ahmed and Supachalasai 2014). These projections indicate that average temperature in Sri Lanka could rise by 3.6 °C, 3.3 °C and 2.3 °C under A2, A1B and B1 scenarios respectively by 2080 (Table 1). The study also projects an increase in precipitation by 39.6, 35.5 and 31.3 per cent respectively under A2, A1B and B1 scenarios by 2080. Another prediction is that average number of consecutive dry days per year will increase progressively over time.

Urban and Climate Change Policies and Frameworks

While Sri Lanka currently does not have an explicit National Urban Policy, Sri Lanka has reached some milestones in urban planning policies at the national level. The country developed the **National Physical Planning Policy and**

Plan 2011-2030 (NPPP)³, which is considered as the guiding framework for urban development in the country. The NPPP, prepared by the **National Physical Planning Department (NPPD)** is currently undergoing revision, and provides guidance to promote and regulate the integrated planning of economic, social, physical and environment aspects of land in Sri Lanka. The Plan is implemented in the form of regional and local development plans as well as national and urban-level infrastructure development projects and programmes. It is a legal document that provides overall guidance for national, regional and local level urban development and human settlements activities. Within the broad planning framework presented in NPP, the government has recently developed the Megapolis Development Plan for Western Region, which is another milestone in urban planning policy in Sri Lanka.

The National Climate Change Policy of Sri Lanka (NCCP), prepared by the Ministry of Mahaweli Development and Environment outlines the broad framework for action to address climate change issues in Sri Lanka. The policy covers major areas of vulnerability, adaptation, mitigation, sustainable production and consumption and knowledge management. It also pledges to strengthen collaboration and coordination at different functional levels of the Government. Within the broad policy framework of NCCP, the **Climate Change Secretariat (CCS)** has prepared the **National Adaptation Plan for Climate Change Impacts in Sri Lanka: 2016-2025 (NAP)** that covers multiple sectors including human settlements and infrastructure. The NAP will be the major plan of action in climate change in Sri Lanka for next 10 years.

Besides the policy space created by NCCP and NAP, impacts of extreme climate events are also addressed by national disaster risk management policies. The Ministry of Disaster Management has prepared two main policy documents that guide disaster risk management activities with the aim of reducing potential risk of disasters and their impacts: the **National Policy on Disaster Management (NPDM) and Sri Lanka Comprehensive Disaster Management Programme (SLCDMP) 2014-2018**, which are soon to be replaced with the **National Disaster Management Plan 2018-2030**. These documents cover diverse disasters including disasters not induced by climate change (e.g. Tsunami). During and after extreme weather events, disaster management policies can become of greater practical relevance than climate change policies.

The government is measuring its development progress with strong recognition of the Sustainable Development Goals and is publishing respective data sets online. It is further a signatory country of the Paris Climate Agreement since April 2016. There are plans to strengthen integration of these international frameworks with the National Physical Planning Policy and the Plan.

² Index for Risk Management (INFORM) Country Risk profile for Sri Lanka, 2017. Online at <http://www.inform-index.org/Countries/Country-profiles/iso3/LKA>

³ Sri Lanka's National Physical Planning Policy and Plan, 2010. Online at http://www.preventionweb.net/files/15417_nationalphysicalplanningpolicyplan.pdf

⁴ Department of Census and Statistics Sri Lanka, 2017. <http://www.statistics.gov.lk/sdg/index.php>

What has been done so far?

The government has identified vulnerable areas, potential hazards and adaptation measures, and the National Physical Planning Policy and Plan is being updated to incorporate climate change considerations. Within the development process of the National Adaptation Plan, sectoral plans have been prepared. The plans identified nine sectors as being most vulnerable with regards to climate change, and human settlements and infrastructure is one of these nine. The general aim of the sectoral plan is to enhance the resilience of human settlements and infrastructure against water and heat stress. The identified adaptation option is to improve and promote building designs for enhanced climate resilience.

UN-Habitat and the Institute of Policy Studies (IPS) Sri Lanka has thus far carried out a study on policies concerning urban planning and climate change in Sri Lanka and submitted recommendations to the National Physical Planning Department (NPPD). The NPPP was identified as the best starting point to mainstream climate change into national-level urban policies because it provides the legal space to carry forward mainstreaming climate change into the ground level through regional and local level plans.

Lessons learned from project

The studies concerning government capacity revealed that at the local level, capacities are very minimal and topics such as climate change are often not well understood.

Further, local political leaders are often reluctant to delve deeper into what might be considered 'problematic' issues, in order to increase their chance to get re-elected. Capacity building efforts can be tremendously hindered in Sri Lanka as the current arrangement requires local government officers to be transferred every three years to another location. It is therefore crucial that new policies are institutionalized quickly whenever the existing political environment allows for it.

Additionally, it was found through the study that none of the existing plans or policies in urban sector cover climate change adaptation as a special focus area. At the national level, the NPPP is currently being updated to address climate change as a challenge and risk factor in the planning process. At the regional or local levels, only a few recent plans have covered disaster risk management aspects. Generally, climate change policies, plans, and programmes in urban areas have not been satisfactorily implemented.

There are various causes for these gaps and needs. The Government does not prioritize climate change in sectoral policies, and there is frequent disengagement of policy development in urban planning, climate change and disaster management; poor institutional coordination between responsible agencies, a limited understanding of the impacts of climate change on the urban sector, and a lack of project related criteria for evaluating the impacts of climate change.



// Image 2. Disaster Floods, Sri Lanka © UN-Habitat

At the time the NPPP was approved in 2011, Sri Lanka did not have a climate change policy in place. While it was expected that the action plan would be integrated into the NPPP, it could not be realised as the vulnerability as well as fragility assessments were not completed by that time.

At the moment, there are limited capacities in different fields within the Climate Change Secretariat. However, the Secretariat is currently preparing an adaptation readiness plan and there are plans to apply for funding for urban-related initiatives from the Green Climate Fund.

Impacts of the project

Although urban development and human settlements are identified as main areas of interest in climate and disaster risk management strategies, climate change dimensions are not specifically considered as a challenge in urban planning instruments. Due to on this gap, it was recommended to identify climate change as a major risk factor in urban development strategies. Development of policy guidelines for urban planning which emphasizes the inclusion of transportation, resilient building codes and Development of urban planning and policy guidelines that place emphasis on transportation, resilient building codes, disaster preparedness measures to mitigate, adapt and manage disasters was identified as an urgent agenda.

Moreover, guidelines and recommendations were developed to strengthen the capacity of Sri Lanka's NPPD. Actions and responsible agencies have been identified according to responsibilities, and major stakeholders are the National Physical Planning Department (NPPD) and the Urban Development Authority (UDA).

Where to go from here?

There are a number of recommendations proposed by the study to the Government of Sri Lanka in order to address current gaps and needs.

General recommendations include:

- i)** Review the observed and projected climate change with impacts on urban sector as a major risk factor in the NPPP,
- ii)** State the principles to be adopted for addressing climate change impacts in urban planning,
- iii)** Establish objectives and goals, making references and connections to the existing national level action plans, programs and initiatives concerning climate change,
- iv)** Adopt a grading system of risk factors for subnational governments to accommodate the uncertainty of climate

change impacts and vulnerability of urban areas in preparation of urban plans,

- i)** Develop guidelines for undertaking specific climate actions, including the relocation of activities especially vulnerable to climate change effects, measures to harness excessive rainwater, and "green cover" guidelines specifying plot coverage and open area requirements,
- i)** Introduce the concept of Climate Impact Assessment during the initial stages of projects.

To enhance climate change adaptation efforts, it was further recommended to promote the use of alternative materials in order to increase resilience vis à vis climate-related hazards, as well as climate-resilient building design, and development of sector-specific building standards and guidelines for urban, rural, coastal and estate sectors.

To further enhance its mitigation efforts, Sri Lanka should aim to reduce its transportation-based emissions, develop guidelines for low carbon concepts such as green cities and green infrastructure, introduce green building concepts to urban designs, establish green zones for urban areas to balance emissions, and estimate carbon footprints as a mandatory part of regional and local plans.

In order to be more prepared for disasters, it was recommended to develop hazard preparedness plans for urban settlements, promote disaster-resilient buildings, including through enhanced building codes, and develop protocols for local authorities to take action in emergency situations.

Some conducive developments that are in line with the guidelines and recommendations have already been taken up, including:

- Preparation of green building guidelines by the Urban Development Authority (UDA);
- Updating the National Physical Plan and Policy taking climate change into account as an important dimension;
- The Climate Change Secretariat is in the process of implementing NDCs (adaptation and mitigation) and currently forming sectoral Planning and Monitoring Committees to cover 14 sectors. The urban sector is one among them.

The Climate Change Secretariat is currently preparing the Third National Communication to the United Nations Framework Convention on Climate Change that includes greenhouse gas inventory and vulnerability assessments, and considers the situation in urban sector as well.

In the table below, the content of this case study has been applied to the Mainstreaming Framework introduced in the Regional Guide. Red text indicates completed or ongoing actions from the case study that correspond to individual tasks recommended within the Framework. Blue text indicates possible next steps, per the case study content.

	I) Substantive process	II) Resource & Capacity Assessment & Development	III) Urban & Climate Related Policy Alignment	IV) Institutions & Stakeholders
Phase A: Feasibility & Diagnosis	<ul style="list-style-type: none"> ✓ Identify drivers (WHY) you want to mainstream climate action into urban policy - make your case for mainstreaming <i>Action Taken - National Physical Planning Policy and Plan identified as the best starting point for mainstreaming.</i> ✓ Identify urban-related climate change issues, mainstreaming objectives & climate actions (WHAT) <i>Next Steps - The Climate Change Secretariat is currently preparing the Third National Communication that includes GHG inventory and vulnerability assessments</i> ✓ Customize your mainstreaming process using this Framework (HOW) - creating process Timeline ✓ Analyze good practices for Monitoring & Evaluation (M&E) & draft Plan, including indicators for mainstreaming goal & interim milestones ✓ Compile Diagnosis Paper based on outputs of all tasks from your tailored mainstreaming process Phase A 	<ul style="list-style-type: none"> ✓ Identify a Core Team for feasibility & diagnosis, formulation, implementation & M&E phases of mainstreaming process (WHO) ✓ Assess availability & gaps in needed human, financial, informational, institutional & other resources for undertaking a mainstreaming process & develop Financing & Capacity Development Strategy 	<ul style="list-style-type: none"> ✓ Identify relevant national, sectoral & sub - national urban - related documents, including stage of National Urban Policy development, sources of financing & check if climate change mainstreamed <i>Action Taken - Study on policies concerning urban planning was conducted</i> ✓ Identify relevant national, sectoral & sub-national climate policies, strategies & frameworks that have relevance in urban context & check if urban-related concerns sufficiently covered <i>Action Taken - Study on policies concerning climate change was conducted</i> ✓ Identify relevant sections in international frameworks linked to urban development &/or climate change with relevance for urban context <i>Next Steps - Strengthen integration of Sustainable Development Goals and Paris Agreement with the National Physical Planning Policy and the Plan</i> ✓ Find existing mainstreaming efforts of climate change concerns into national, sectoral or sub-national urban policies from other countries - diagnose if helpful for your context <i>Action Taken - Review of mainstreaming initiatives was conducted to identify gaps, constraints and best practices.</i> ✓ Identify other cross-cutting issues (e.g. gender) that could be mainstreamed in your policy formulation or revision alongside climate change & existing mainstreaming processes of your country & other countries to learn from ✓ In Diagnosis Paper, undertake comparative analysis of above-mentioned set of country documents (& international frameworks) & identify urban policy document(s) to mainstream climate actions into (WHERE), / or propose using mainstreaming process to drive development of new NUP 	<ul style="list-style-type: none"> ✓ Map & analyze relevant parts of country's institutional landscape (government) & identify potential mainstreaming champions <i>Action Taken - National Physical Planning Department and Urban Development Authority identified as major government stakeholders.</i> ✓ Map & analyze relevant key stakeholders (outside government) & identify potential mainstreaming champions ✓ Determine potential means & level of engagement of relevant institutions & key stakeholders based on capacities & interest (HOW, WHAT) & agree on Participation Strategy for mainstreaming process, including forming a Reference Group (WHO)

	I) Substantive process	II) Resource & Capacity Assessment & Development	III) Urban & Climate Related Policy Alignment	IV) Institutions & Stakeholders
Phase A: Feasibility & Diagnosis	<p>The goals, substance & main steps of the mainstreaming process (including M&E) have been clearly articulated in the Diagnosis Paper</p>	<p>The necessary (human, financial) resources & institutional commitments for the mainstreaming process have been secured</p>	<p><i>Action Taken</i> - The National Physical Planning Policy and Plan 2011-2030, which provides a guiding framework for urban development in the country, was determined the best entry point for mainstreaming.</p> <p>Recommendations were developed for the National Physical Planning Department.</p> <p>The urban policy document(s) into which to mainstream has/ have been identified & an annotated outline drafted (or a new climate responsive NUP outline drafted) as part of the Diagnosis Paper</p>	<p>Consensus has been reached with institutional partners & other stakeholders on content & process for mainstreaming policy formulation & implementation as proposed in the Diagnosis Paper</p>
<p>Output Phase A: Preparation: DIAGNOSIS PAPER, the content of which has been agreed by key institutions & stakeholders, containing:</p> <ul style="list-style-type: none"> ✓ Goal & objectives of the mainstreaming process ✓ Summary of urban-related climate issues & diagnosis of urban & climate related policies (SWOT, gaps, priorities) ✓ Annotated outline of content to be mainstreamed into a certain policy or set of policies ✓ A preliminary strategy for mainstreaming process is outlined in broad terms, including general roles, resources & M&E 				
Phase B: Formulation	<ul style="list-style-type: none"> ✓ Prepare detailed Formulation Work Plan for Policy Proposal ✓ Conduct periodic M&E as per plan developed in Phase A: ✓ Undertake Implementation Analysis to understand legislative Institutional & administrative landscape <p>The drafting process has been well planned and executed & an Implementation Analysis has been included in the Policy Proposal</p>	<ul style="list-style-type: none"> ✓ Undertake capacity development activities of Core Team or reference group if needed <p><i>Action Taken</i> - Identification of human, financial and institutional capacity constraints was undertaken, both on the national and local levels.</p> <p>The Core Team & the Reference Group has clear assignments & capacity to complete them in time & with high quality, including periodic M&E</p>	<ul style="list-style-type: none"> ✓ Formulate Policy Proposal, including clear indication of what other documents need to be aligned & estimation for budget needs & other resources to implement the mainstreaming objectives <i>Action Taken</i> - Revision of National Physical Policy and Plan underway to integrate climate change issues ✓ Align national policy targets with international framework targets & indicators as well as review and reporting requirements as far as possible <i>Action Taken</i> - Integration of urban-related concerns into climate-related processes (NDC implementation / Third National Communication) <p>Text of policy proposal has been either newly formulated or adapted to include: a) climate responsive language, b) evidence on climate change status quo & trends & impact of planned climate actions, & c) concrete mainstreaming objectives & climate actions – by sectors & at national & sub-national levels</p>	<ul style="list-style-type: none"> ✓ Involve relevant institutions & key stakeholders in formulation process & Implementation Analysis <p>Participating institutions & stakeholders support formulation of changes & are ready to support implementation</p>
<p>Outputs Phase B: Formulation: POLICY PROPOSAL (i.e. mainstreamed national urban policy/ies document), whose content has been agreed by key institutions & stakeholders;</p> <ul style="list-style-type: none"> ✓ and if appropriate, draft recommendations for operationalization in follow-on legislation & planning. 				

//⁵ Policy here is defined as including any policies, strategies, frameworks, legislation, regulations, key programs, initiatives and plans of a normative/ guiding or of a legally binding nature

	I) Substantive process	II) Resource & Capacity Assessment & Development	III) Urban & Climate Related Policy Alignment	IV) Institutions & Stakeholders
Phase C: Implementation	<ul style="list-style-type: none"> Facilitate the process of having the Policy Proposal sanctioned/ adopted or agreed by the respective oversight / decision-making bodies in line with country-specific requirement Continuously monitor process & outcomes of implementation, & create feedback mechanisms to inform future policy cycles (responsibilities defined, clear progress indicators, analysis of downstream policy documents, regular meetings with reference group & key stakeholders) <p><i>The process of adopting and operationalizing the policy has been completed</i></p>	<ul style="list-style-type: none"> Create detailed implementation work plan on support/ coordination/ oversight by Core Team & Reference Group Support resource mobilization for implementation of mainstreamed climate actions, considering domestic & international, private & public financing sources & mechanisms & support measures to channel financial resources to sectoral & sub-national implementing bodies, <p><i>Action Taken - Climate Change Secretariat is currently applying for funding from the Green Climate Fund for urban-related initiative.</i></p> <ul style="list-style-type: none"> Develop capacities of sectoral & sub-national implementing bodies if mandated & needed (including on how to access climate financing) & support institutionalization of capacity building processes where possible <p><i>Action Taken - Guidelines and recommendations were developed for capacity building of National Physical Planning Department.</i></p> <p><i>Next Steps - Recognized need for awareness raising for climate change in the urban sector, as well as the need for guidelines for addressing climate change impacts on both the national and subnational levels</i></p> <p><i>All necessary resources & capacity development for successful implementation have been provided to all key implementers</i></p>	<ul style="list-style-type: none"> Oversee, encourage or assist sectoral ministries or government agencies to align existing policies & plans, or develop new ones in line with implementation objectives of the newly mainstreamed national level urban policy/ies <p><i>Action Taken - Guidelines and recommendations were developed for capacity building of National Physical Planning Department.</i></p> <ul style="list-style-type: none"> Mandate, encourage or assist local governments to align existing policies & plans, or develop new ones in line with implementation objectives of the newly mainstreamed national level urban policy/ies <p><i>All linked ("downstream") documents have been aligned with new climate responsive national urban policy, enabling actors to start implementation of urban-related climate actions</i></p>	<ul style="list-style-type: none"> Facilitate delegation of roles & responsibilities to sectoral & sub-national implementation bodies <p><i>Next Steps - Recognized need for better institutional coordination between responsible agencies</i></p> <p><i>All relevant government bodies & other stakeholders actively & inclusively contributed to policy adoption & operationalization; their roles were clarified & if appropriate institutionalized</i></p>
Output Phase C: Implementation: POLICY ADOPTION & OPERATIONALISATION				
<ul style="list-style-type: none"> Implementation plan with clear timelines, tasks & roles, confirmed resources & covering capacity development needs; Mainstreamed National Urban Policy/ies Document has been ratified (if legally binding according to country's legislative process), its directives & recommendations have been transcribed into respective laws & regulations, & operationalized in sectoral and sub-national policy documents, & plans & budgets have been aligned accordingly 				
Phase D: Implementation	<ul style="list-style-type: none"> Evaluate if mainstreaming process has been effective & inclusive Evaluate if policy proposal sanctioned/ adopted or agreed by the respective oversight / decision-making bodies Evaluate if climate-responsive national urban policy has been operationalized with follow-on policies, legislation, plans etc. Plan or encourage evaluation of whether the mainstreamed/ new national urban policy has enabled implementation of urban-related climate actions 	<ul style="list-style-type: none"> Evaluate if capacity building had desired impact & reached the right people Evaluate if climate responsive national level urban policy aligned with local, national & global financing opportunities 	<ul style="list-style-type: none"> Evaluate if mainstreaming process of national urban policy/ies fully considering existing sectoral & sub-national policies & legislation Evaluate if mainstreamed urban policy/ies aligned with targets, indicators, monitoring & review of international frameworks 	<ul style="list-style-type: none"> Evaluate if institutional roles, responsibilities, coordination clear & process is functioning Evaluate if all key stakeholders were meaningfully involved throughout, their resources were effectively incorporated & their needs met
<p><i>Evaluation process has been implemented & institutionalized including all relevant government bodies & stakeholders</i></p> <p>Output Phase D: Evaluation: EVALUATION REPORT, whose content has been agreed by key institutions & stakeholders</p> <ul style="list-style-type: none"> Institutionalisation of periodic evaluation & review of policy impacts with feed-in of learnings into subsequent policy processes 				