

Draft 1.6
3 Nov 2010

Information, Education and Communication Strategy for Climate Change Adaptation in Sri Lanka

Forming part of the
National Climate Change Adaptation Strategy

DISCUSSION PAPER

Prepared under
ADB TA 7326 (SRI): Strengthening Capacity for Climate Change Adaptation

Implemented by:
Climate Change Secretariat, Ministry of Environment
Sri Lanka

November 2010

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Acknowledgements

The team appreciates and would like to acknowledge all the support provided by the Climate Change Secretariat, Ministry of Environment, the Asian Development Bank, and the hundreds of other stakeholders who have worked with us, guided us, and encouraged us over the past months to develop this strategy. Without you the entire exercise would have been impossible.

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ABBREVIATIONS AND ACRONYMS

ADB	Asian Development Bank
CBD	Convention on Biological Diversity
CC	Climate Change
CCA	Climate Change Adaptation
CCS	Climate Change Secretariat
CDM	Clean Development Mechanism
CEA	Central Environmental Authority
CZMP	Coastal Zone Management Plan
DRR	Disaster Risk Reduction
DSD	Divisional Secretariat Divisions
EIA	Environmental Impact Assessment
ERD	External Resources Department
GIS	Geographic information Systems
GOSL	Government of Sri Lanka
HLP	National Action Plan for Haritha Lanka Programme
IEC	Information, Education and Communication
INGO	International Non-Governmental Organization
IPCC	Intergovernmental Panel on Climate Change
IWRM	Integrated Water Resource Management
MCBF	Mahinda Chintana: A Brighter Future
MC10YP	Mahinda Chintana: A Vision for a New Sri Lanka, a Ten Year Horizon Development Framework 2006-2016
MoE	Ministry of Environment
MoF	Ministry of Finance
NCCAS	National Climate Change Adaptation Strategy
NGO	Non-Governmental Organization
NBRO	National Building Research Organization
NPD	National Planning Department
SEA	Strategic Environmental Assessment
SLTDA	Sri Lanka Tourism Development Authority
SNC	Second National Communication (to UNFCCC)
SVP	Sector Vulnerability Profile
SWG	Sector Working Groups
TA	Technical Assistance
UDA	Urban Development Authority
UNFCCC	United Nations Framework Convention on Climate Change

What is Climate Change Adaptation?

The world's climate is changing and will continue to change at rates unprecedented in recent human history. The impacts and risks associated with these changes are real, and are already happening in many systems and sectors essential for human livelihood, including water resources, food security, coastal zones and health. Developing countries, especially those that are least developed, and the poorest communities, are the most vulnerable.

There are two main responses to climate change, viz:

- **climate mitigation** is cutting the emissions that cause climate change;
- **climate adaptation** is preparing for the impacts of climate change.

UN Intergovernmental Panel on Climate Change (IPCC) has defined climate adaptation as the "adjustment in natural or human systems in response to actual or expected climatic stimuli or their effects, which moderates harm or exploits beneficial opportunities".

<http://www.ipcc-wg2.org/index.html>

UN Framework Convention on Climate Change (UNFCCC) says: "Adaptation to the adverse effects of climate change is vital in order to reduce the impacts of climate change that are happening now and increase resilience to future impacts. Successful adaptation not only depends on governments but also on the active and sustained engagement of stakeholders, including national, regional, multilateral and international organizations, the public and private sectors, civil society and other relevant stakeholders."

http://unfccc.int/press/fact_sheets/items/4985.php

The UNFCCC, which Sri Lanka has signed and ratified, further explains the need for climate adaptation at: http://unfccc.int/files/press/application/pdf/adaptation_fact_sheet.pdf

International Institute for Environment and Development (IIED) says:

"It is now well established that anthropogenic climate change is a reality, and that those worst affected will be the poorest people, in poor countries. The impacts of climate change therefore pose a massive threat to development, and action on adaptation to climate change, particularly in developing countries, is urgent. Adaptation to climate change describes the adjustment in natural or human systems in response to actual or expected climatic stimuli or their effects, which moderates harm or exploits beneficial opportunities. The current costs of adaptation in developing countries are huge, and while estimates vary, there is general agreement that figures are in the range of tens of billions of dollars per annum."

<http://tiny.cc/IIED-CCA>

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Executive Summary

This document is the outcome of work carried out under the Asian Development Bank (ADB) Technical Assistance Project ADB TA 7326 SRI: Strengthening Capacity for Climate Change Adaptation in Sri Lanka. In this project, a team of consultants engaged by the ADB worked with the Ministry of Environment, Sri Lanka, in formulating a National Climate Change Adaptation Strategy (NCCAS) to increase Sri Lanka's resilience to climate change impacts whilst pursuing sustainable economic development. When adopted, the NCCAS would stimulate improved effectiveness of environmental management and better organization of stakeholders to address climate change adaptation -- or coping with climate change impacts.

This Information, Education and Communication (IEC) Strategy forms an integral part of the NCCAS. It is based on the premise that raising public understanding and support through effective communication is a precondition for changes in policy, practice and behaviour at all levels in society. It recognizes that such change happens slowly and incrementally involving the engagement of multiple stakeholders at different levels: awareness raising; updating and deepening of knowledge; training and capacity building; and advocacy. Climate change adaptation being a relatively new concept, this Strategy offers some generic lessons learnt from a comparable process -- the gradual shift to disaster risk reduction (DRR).

This Strategy does not address public awareness or education on the overall subject of climate change; instead, it specifically focuses on climate change adaptation. It recommends an appropriate communication framework, within which individual activities -- such as influencing policy change and practice, materials production, public events and capacity building efforts - may be designed and implemented from 2011 to 2016. In that sense, what is outlined here is akin to a 'pipeline system'; it stops short of suggesting specific activities, or the 'water' that would eventually flow through that system.

The IEC Strategy defines the key audiences that need to be reached, and proposes a framework and approaches to engage and, hopefully, influence them. It also suggests probable messages and themes to form the basis of that engagement, and recommends key partnerships and collaborations that could help. In addition, the strategy identifies institutional mechanisms needed to implement it, and estimates the resources required.

This IEC Strategy does not recommend any high profile, short-term campaigns on climate change. It strongly cautions against the buying of media space/time to deliver related messages to the different audiences who need to be engaged. Far more strategic and cost-effective would be to initially engage the primary target institutions/groups through tightly-focused small group activities, and gradually expand to involve secondary target groups as well. Key to success in this process would be forming partnerships with 'message multipliers' (such as the education system and the mass media).

Finally, the Strategy also briefly addresses how best Sri Lanka can position its climate change adaptation needs in the international context.

Information, Education and Communication Strategy for Climate Change Adaptation in Sri Lanka

Forming part of the National Climate Change Adaptation Strategy

1. Introduction

1.1 Sri Lanka's climate vulnerability

Having emerged as an environmental concern, climate change is now regarded worldwide as an overarching development challenge. Most scientists now agree that some climate change impacts are inevitable; they are still trying to assess how, where and when such impacts would manifest. But there is broad agreement on how climate change impacts can seriously affect the economic growth, food security, public health, social stability and even the national security of all countries. As a developing county and an island nation, Sri Lanka is especially vulnerable to these impacts.

1.2 National Climate Change Adaptation Strategy

Climate change adaptation (preparing for the impacts of climate change) is often the overlooked cousin to climate change mitigation (cutting the emissions that cause climate change). In the global context, Sri Lanka's contribution of greenhouse gases is small, and its ability to mitigate is therefore very limited. However, Sri Lanka critically needs climate change adaptation to ensure that its economic development can continue without disruption or setbacks, and investments in poverty reduction, food and water security, and public health will not be undone.

This is the thinking behind the National Climate Change Adaptation Strategy (NCCAS), which aims to increase Sri Lanka's resilience to climate change impacts whilst pursuing sustainable economic development. The NCCAS aims to stimulate improved effectiveness of environmental management and better organization of stakeholders to address climate change adaptation.

The NCCAS is structured into five Strategic Thrusts, as follows:

Strategic Thrust	Coverage
1. Mainstream Climate Change Adaptation into National Planning and Development	Includes cross cutting policy measures, capacity building, safeguards, monitoring programs, coordination mechanisms, etc.
2. Enable Climate Resilient and Healthy Human Settlements	Includes housing, urban development and planning, public health, urban drainage, drinking water, urban wetlands, etc.
3. Minimize Climate Change Impacts on Food Security	Includes agriculture, fisheries, irrigation, nutrition, etc.
4. Improve Climate Resilience of Key Economic Drivers	Includes tourism, transport, power, commercial agriculture, etc.
5. Safeguard Natural Resources and Biodiversity from Climate Change Impacts	Includes water resources management, biodiversity conservation, etc.

1.3 Role of IEC in climate adaptation

Education, information and communication (IEC) action can lead to better informed decisions and enlightened choices concerning climate change adaptation.

The United Nations Framework Convention on Climate Change (UNFCCC), which Sri Lanka has signed and ratified, recognizes the importance of IEC. It calls for “improving awareness and understanding of climate change, and creating solutions to facilitate access to information on a changing climate” to winning public support for climate related policies. The UNFCCC, through its Article 6, and its Kyoto Protocol, through its Article 10 (e), call on governments “to educate, empower and engage all stakeholders and major groups on policies relating to climate change”.¹

When strategically carried out, IEC can be a powerful force for change on both the ‘supply’ and ‘demand’ sides of climate adaptation and climate related public information. In this analogy:

- ‘supply’ involves providing authentic, relevant and timely information to all those who need it, in languages and formats they can readily use; and
- ‘demand’ means inspiring more individuals and entities to look for specific knowledge and skills that can help make themselves more climate resilient.

These two sides of the equation can positively reinforce each other, contributing significantly to Sri Lanka’s fight against climate change.

Recognizing this potential, the NCCAS has incorporated the elements of IEC under each of its five Strategic Thrusts. This reflects an approach to communication as being integral (and not supplementary) to climate change adaptation. This IEC Strategy is an expansion of the IEC elements already encapsulated in the main NCCAS.

¹ http://unfccc.int/cooperation_and_support/education_and_outreach/items/2529.php

2. Strategy methodology and consultative process

This IEC Strategy has been prepared parallel to the NCCAS preparation, and is preceded by a consultative process that involved multiple stakeholders. Highlights:

- The process benefited from an Informal Working Group (IWG) whose members were drawn from education, media and communication backgrounds (Appendix 1).
- A country-wide Survey on Public Perceptions on Climate Change in Sri Lanka was commissioned through a market research company, capturing and collating the views of 1,000 persons. A summary is provided in Appendix 2.
- Informal consultations were carried out with over 300 public officials in 9 Divisional Secretariats in the Ratnapura and Puttalam Districts. The aim was to informally consult officials working in public administration, to derive some insights on their current awareness levels and priority information needs.
- A stakeholder consultation workshop specifically for IEC strategy preparation was held in Colombo on 22 July 2010, attended by over 40 participants representing a wide range of public, academic, civil society and private sector institutions.
- A database of existing IEC materials on climate change was initiated after contacting public sector institutions identified in Sri Lanka's Second National Communication (SNC) to the UN-FCCC which was under preparation parallel to this strategy process.
- All IEC related suggestions and discussions that emerged during the extensive consultative process for the NCCAS development were also considered.

3. Strategic approach to integrating IEC in climate change adaptation

3.1 Paradigm shifts and behaviour change

Climate change challenges humanity to rethink its economic development processes and usher in radical changes within the short span of a few years. It is not easy to achieve such rapid and decisive behaviour change, but the window of opportunity -- as assessed by the IPCC and other experts -- is indeed a tight one. IEC can trigger and sustain this transformation to adopting more environment friendly lifestyles and building climate resilient societies.

Even on a fast-track basis, behaviour change happens incrementally in both individuals and institutions. Such change requires the sustained engagement of multiple stakeholders, and interventions at different levels: awareness raising; updating and deepening of knowledge; training and capacity building; and advocacy.

In the case of climate change adaptation, it also challenges everyone involved to change their ways of thinking and acting -- in other words, a paradigm shift. The preparation of this Strategy studied a comparable paradigm shift achieved in recent times: the mainstreaming of disaster risk reduction (DRR) in Sri Lanka during the five years, 2005 - 2010. Its generic lessons (Box 1 and Appendix 3) indicate the need for stakeholder engagement over a long period.

3.2 The state as 'path-finder'

Mainstreaming climate change adaptation (CCA) in society would entail equally formidable and prolonged efforts. In that process, IEC would be necessary -- but not sufficient on its own. As with DRR, the CCA process will also need to be led by the state through enabling policies, laws and regulations on the one hand, and by setting an example on the other hand. This involves placing a heavy emphasis on engaging state sector institutions during the early stages of climate change adaptation.

Box 1

Mainstreaming DRR in Sri Lanka

The recent, gradual shift from disaster response to disaster risk reduction (DRR) in Sri Lanka was the result of sustained efforts by a few dedicated professionals in state and civil society sectors concerned with disaster management and humanitarian issues. The following key lessons of that experience are also relevant to mainstreaming climate adaptation:

- Countering resistance to a new paradigm by working at small group level, engaging relevant stakeholders including critics.
- Influencing policy change by working with the relevant ministries, departments and other state agencies.
- Influencing practice by engaging ground level implementation agencies in central, provincial and local government bodies, as well as relevant civil society groups.
- Adapting existing communication modes to build public demand and support for the changes, and recognize champions.

A more detailed account of this process is given in Appendix 3.

The various arms and agencies of the state will need to be path-finders and promoters of climate change adaptation. This is particularly relevant in Sri Lanka, considering the predominant roles played by the state and its various arms in natural resource ownership and management, direct economic activity, as well as investment of public funds in the stock market, etc.

After a while, the other stakeholders in corporate, academic and civil society sectors can play a greater role in climate change adaptation. (For example, promoting climate resilient building codes would need legal and regulatory changes first. The construction companies and property developers would internalize them after a while when they discover the benefits.)

As mentioned in 1.3, IEC can be the catalyst and ‘lubricant’ that works on both the supply and demand sides of this process.

3.3 Partnering with ‘Message Multipliers’

Message multipliers are those who have existing, functional systems or networks that can reach out to large numbers of people quickly and relatively inexpensively. There are many and varied multipliers, including the formal education system, print and broadcast media, civil society networks and professional groups.

Partnering with relevant message multipliers would enable the CCA related IEC activity to engage more stakeholders at a lower cost.

3.4 IEC Strategy’s focus

This Strategy remains focused on climate change adaptation. It does not directly or specifically address the issues such as the evolving climate science, international politics and debates surrounding climate change, or the other category of climate responses called climate mitigation. It recognizes, however, that many stakeholders may not distinguish these demarcations.

Importantly, this Strategy does not recommend any high profile, short-term public or media campaign on climate change. It also cautions against any buying of media space or time to deliver a set of messages to the multiple and diverse audiences. Instead, it recommends engaging the primary target institutions and groups through tightly-focused small group activities in the first instance, and later expanding that engagement to involve secondary target groups as well. (These audiences are introduced in 4.2 and defined

further in Appendices 4 to 8.) Such an approach would be more strategic and cost-effective.

3.5 Wider context for effective IEC activities

To be realistic and effective, all IEC activities need to take into account the wider demographic, social and cultural factors and realities.

A decade into the 21st Century, Sri Lankan society is undergoing macro-change at several levels. These trends include:

- rising income levels which has already turned Sri Lanka into a lower middle income country with a per capita GDP slightly exceeding USD 2,000;
- a predominantly youthful population that is nevertheless ageing faster than in most other Asian countries;
- a literate population that is, on the whole, eager to acquire new knowledge and skills;
- an expanding information society where access to telecom services and mass media has increased phenomenally in recent years due to market liberalization; and
- a more pluralistic market where providers of education, information and communication services compete intensely for the attention and patronage of 20 million people.

When the country's language and ethnic diversity are also factored in, it is clear that there is no single pathway or 'pipeline' to reach all Sri Lankan people. It calls for a differentiated and nuanced approach.

4. IEC Strategy for Climate Change Adaptation

4.1 Goal and Objectives

The overall goal of this IEC Strategy is to create an enabling environment through raised awareness to support the policy, legal, regulatory, technological and financial aspects of climate change adaptation proposed in the NCCAS.

The core objectives of the IEC Strategy are to:

- Increase public understanding of climate change adaptation choices and responses at community, provincial, national and global levels;
- Enhance the frequency and quality of public discussion and debate on climate change impacts and responses in all sectors;
- Build up mass support for climate-friendly public policies and private practices, with particular focus on climate change adaptation;
- Support and create enabling conditions for specific climate change adaptation interventions as they are rolled out in key sectors; and
- Stimulate behaviour change at individual, household, community and institutional levels.

The additional objectives of this Strategy are to:

- Provide a framework for engaging message 'multipliers' such as educators, mass media and industry networks in outreach and awareness activities, so as to increase the number of stakeholders who participate in climate change adaptation;
- Provide communication related guidance to the Climate Change Secretariat of the Ministry of Environment (MOE/CCS); and
- Mobilise resources to scale up and intensify IEC activities on climate change adaptation undertaken by the Ministry of Environment and its partners.

4.2 Defining Audiences

Given the pluralistic society referred to in 3.5 and considering the multitude of actions that need to be pursued for climate change adaptation, it is essential that primary and secondary audiences are clearly defined.

The primary audience or target groups for CCA are mainly institutions in central, provincial and local government. Engaging these groups on a priority basis will help Sri Lanka to mainstream climate change adaptation in all sectors. The main categories and sub-categories are listed below, and are expanded in Appendices 4 to 8 (this is not an exhaustive list).

Strategic Thrust in NCCAS	Primary audience comprises...
1. Mainstream Climate Change Adaptation into National Planning and Development	<ul style="list-style-type: none"> • National Planners • National Physical Planners • Human Settlement Planners • Infrastructure Planners • Renewable Energy Developers • Disaster Risk Reduction (DRR) Implementers • Researchers • Media Practitioners • Development aid donors • Biodiversity conservators (of state agencies mandated to protect forests and wildlife) • Tourism developers • Plantation sector • Livestock developers
2. Enable Climate Resilient and Healthy Human Settlements	<ul style="list-style-type: none"> • Water supply service providers • Human Settlement planners • Health sector professionals, especially epidemiologists • Insurance sector • Human Settlement service providers • Researchers
3. Minimize Climate Change Impacts on Food Security	<ul style="list-style-type: none"> • Water Resource managers • Coastal and Fishery sector developers • Insurance sector • Crop/Livestock breeders
4. Improve Climate Resilience of Key Economic Drivers	<ul style="list-style-type: none"> • Infrastructure planners • Tourism developers • Plantation sector managers • Insurance sector managers and executives
5. Safeguard Natural Resources and Biodiversity from Climate Change Impacts	<ul style="list-style-type: none"> • Water Resource managers • Managers of land resources • Biodiversity conservators (of state agencies mandated to protect forests and wildlife)

The secondary audience or target groups are the others who can help disseminate and promote the CCA messages, and/or can internalize CCA practices in their own livelihoods practices and consumer choices. Their involvement is equally important for the long-term community acceptance and sustainability of the various CCA measures.

Target audience category	Key stakeholders (not an exhaustive list)
Message 'Multipliers': those who can help spread the message to others	<ul style="list-style-type: none"> • Educators (primary, secondary, tertiary levels) • Media professionals (print, broadcast and web-based) • Media gate-keepers & owners (all media types) • Advertising and social marketing professionals • Development organizations with ground level networks • Civil society groups active in environment/development • Others
Scientific and professional associations/networks	<ul style="list-style-type: none"> • Sri Lanka Association for the Advancement of Science • Sri Lanka Institute of Architects • Institution of Engineers, Sri Lanka • Sri Lanka Energy Managers' Association • Construction industry networks • Others
General public	<ul style="list-style-type: none"> • Housewives • School children • University undergraduates

4.3 Main IEC actions

The main elements of the IEC Strategy are the following.

- **Promote information and awareness dissemination:** Demystify perceptions of climate change held by the general public and create an understanding of the factors responsible for climate change in order to promote behavioural change at individual/household level.
- **Mobilize resources:** Provide customized advocacy programs for international donors, INGOs, NGOs and the private sector organizations in order to attract sponsorship for CCA initiatives in Sri Lanka.
- **Create political will:** Provide interactive awareness sessions and advocacy to elected members at National, Provincial and Local Government levels.
- **Influence policy:** Provide motivation to those in a position to create and facilitate change within their respective organizations for promoting adaptation strategies.
- **Influence practice:** Provide a capacity building training modules for government officers (Planners, Plan Implementers, Technocrats, Extension Officers, Development Officers, Social Development Officers, Environment Officers, PHIs, etc.) serving at National and

Provincial level line Departments; Divisional Secretariats; and Local government bodies (Municipalities, Urban Councils, *Pradeshiya Sabhas*)

- **Promote linkages and champions:** Promote the link up with other on-going communication initiatives undertaken by identified target institutions to incorporate CCA in their respective sectors through development of customized message and delivery strategies for beneficiary groups.
- **Empower children and youth as social animators of change:** Provide resource material and knowledge dissemination tools such as videos, text etc., for school teachers, children and undergraduates to enable incorporation of CCA studies in project work and dissertations thereby creating an empowered younger generation capable of serving as animators of attitudinal change.
- **Promote monitoring and evaluation:** Facilitate guideline formulation for Target Institutions to monitor and evaluate interventions undertaken.

4.4 Key messages

Listed below are the IEC-related interventions, as they appear in the NCCAS. These provide the focus and prioritization for messaging and audience engagement.

Strategic Thrust 1:

Mainstream Climate Change Adaptation into National Planning and Development

E. Inform and mobilize stakeholders at multiple levels in support of climate adaptation

The education system, media, and other information ‘multipliers’ are at this point not effectively engaged in disseminating information on climate change. The target groups that need to be mobilized to support climate change adaptation in Sri Lanka are many—ranging from international agencies to local communities. Awareness about technical solutions to climate-induced problems is not available at the local levels, in the local languages and in accessible formats. More effective engagement of civil society organizations is needed, particularly to mobilize for community-level adaptation to climate impacts.

Priority Adaptation Measures:

- i. Effectively engage education system, media, and other information ‘multipliers’
- ii. Make information about adaptation options available at community level
- iii. Promote policy change for climate change adaptation through small group engagement
- iv. Engage existing institutional and community-based mechanisms for coordination
- v. Combat negative anthropogenic activity (such as sand mining)

See Appendix 4 for detailed descriptions.

Strategic Thrust 2:

Enable Climate Resilient and Healthy Human Settlements

E. Increase awareness on vulnerabilities and adaptation of settlements

Awareness levels about the impacts of climate change on human settlements are limited among the public, technical service providers, as well as government agencies. Research in this area is limited, and dissemination of findings is lacking. Media engagement or targeted messaging aimed at increasing the resilience of human settlements to climate change is largely absent and inter-sectoral coordination is lacking as well.

Priority Adaptation Measures:

- i. Improve the gathering, processing and dissemination of information related to human settlements
- ii. Enhance awareness and demand for climate resilient construction
- iii. Improve coordination/dissemination through existing institutional mechanisms
- iv. Engage media more proactively with messaging tailored for stakeholders

See Appendix 5 for detailed descriptions.

Strategic Thrust 3:

Minimize Climate Change Impacts on Food Security

D. Increase awareness and mobilize communities for climate change adaptation

Communities dependent on agriculture are already feeling the impacts of climate change, but awareness about how to adapt at a community or household level is lacking. Some potential adaptation options for the agriculture sector have been studied, but have not been scaled up. Existing field level coordination mechanisms and the extensive grassroots networks of the NGO sector should be effectively engaged or mobilized to support climate change adaptation.

Priority Adaptation Measures:

- i. Increase awareness on climate impacts on food security and on the potential adaptive measures
- ii. Pilot test and scale up community level agriculture/livestock/fisheries adaptation models
- iii. Improve utilization of field level coordination mechanisms and civil society organizations
- iv. Promote risk transfer initiatives

See Appendix 6 for detailed descriptions.

Strategic Thrust 4:

Improve Climate Resilience of Key Economic Drivers

D. Raise awareness about climate vulnerability in key economic sectors

Climate change awareness in key economic sectors is currently low and vague. The capacity within sectors/industries to address climate change concerns is also extremely limited. A sustained and broad-based dialogue to improve awareness, and to mobilize stakeholders within vulnerable industries (such as tourism and plantations) for climate change adaptation is needed. This calls for raising the awareness and understanding of climate vulnerabilities, adaptation options and costs. A balanced and constructive approach is needed.

Priority Adaptation Measures:

- i. Increase climate change awareness at all levels
- ii. Build capacity for climate change adaptation in key economic sectors
- iii. Engage wider stakeholders in dialogue on climate adaptation

See Appendix 7 for detailed descriptions.

Strategic Thrust 5:

Safeguard Natural Resources and Biodiversity from Climate Change Impacts

E. Raise awareness and mobilize stakeholders for conservation of biodiversity and ecosystem services

Rising awareness on the importance of natural resources and biodiversity is crucial in effectively protecting and conserving them. Educating all stakeholders on the current problems -- how these will worsen with climate change, and how each action can help -- is essential in resolving long-standing problems in ecosystem conservation. While public awareness has risen on conserving species and ecosystems, there is still a limited understanding of the newer concepts such as ecosystem services. Enhancing this knowledge would help in promoting integrated, ecosystems-based approaches to climate adaptation.

Priority Adaptation Measures:

- i. Focus on minimizing current stresses on ecosystems
- ii. Promote training and awareness on use of the ecosystem approach for conservation
- iii. Build capacity for climate adaptation research among students and staff of conservation agencies
- iv. Increase public awareness about the value of aquatic and marine ecosystems
- v. Engage in dialogue with wider stakeholders

See Appendix 8 for detailed descriptions.

5. Key engagement methods

The NCCAS has identified the main stakeholder institutions for climate change adaptation in Sri Lanka. These are also captured in Appendices 4 to 8 of this IEC Strategy.

Both documents are based on the broad premise that climate adaptation strategies related to specific sectors are best promoted and championed by the relevant arms and agencies of the state that are legally mandated with the promotion and development of specific sector activities. This is specifically needed for promotion of livelihood oriented adaptation strategies. An example would be targeting tea/coconut/rubber smallholders for which there already are established target institutions and communication mechanisms.

CCA being a new paradigm, these existing mechanisms must be provided with mandates to take on adaptation strategies through appropriate policy changes. Therefore, as is explained in 3.2, national level institutes responsible for such changes must be effectively engaged to accomplish this.

Consequently, existing mechanisms and their constituent institutions can be engaged to promote implementation of such policy changes and to influence practice. This would demand both the awareness creation as well as capacity building.

At the point of service delivery, these activities would mostly involve the Divisional Secretariats (the unit of public administration). The divisional level consultations for this Strategy's preparation provided many insights into what is needed, practicable and acceptable. Their demand was for more demonstration projects that are implemented locally as pilot interventions. This would require mobilization of resources and the political will. Seeing is believing: champions for CCA can be nurtured only through such demonstrations.

Parallel to this, there is a major role for the message multipliers. Their vast outreach and existing trust levels in the community would be particularly helpful in engaging:

- the sections of society whose livelihoods are directly dependent on natural resources (farmers and fishermen among others);
- community level opinion leaders such as teachers and clergy; and
- children and young adults.

Another essential factor for successful IEC engagement is source credibility and public trust. The public perceptions survey (Appendix 2) revealed that the credibility among the public was highest for TV (88%), followed by Internet (51%), radio (42%) and print media (33%). People's trust in all other information sources was very limited. This highlights a critical need to partner with credible multipliers in pursuing IEC activities.

6. Timeline for Strategy Implementation

The following timeframe is envisaged.

- Short/Near Term: 2011 - 2012
- Medium Term: 2013 - 2016
- Long Term: 2017 and beyond

For practical purposes, this Strategy covers the six years from 2011 to 2016. A mid-term evaluation of the efficacy of IEC activity inspired by this Strategy would help determine what may be pursued after 2016.

Since the implementation of IEC activity has to be in step with other climate change adaptation interventions, the precise timing of IEC activities would depend on overall rate of progress.

The Climate Change Secretariat (CCS) would be able to determine this on an annual basis in its work plans. See also discussion in section 7 below.

7. Institutional arrangements: IEC implementation capacity of CCS

The IEC Strategy's framework and recommendations, when accepted, would need to be turned into a Work Plan for implementation. At that stage, individual IEC activities (material production, outreach work, public events, training, etc.) can be defined in detail. Such implementation would see CCS initiating dialogue with stakeholders and engaging them in various partnerships (some partnerships suggested in Appendices 4 to 8). This, in turn, would require an enhanced communications planning and implementation capacity at CCS.

As a first step, it is suggested that CCS carefully defines its niche and roles in the vast spectrum of climate change related information, education and communication activities. This should take into account the following:

- The creation of new knowledge on climate change impacts, mitigation and adaptation takes place in universities, research institutes,

Box 2

Role of CCS: Retailer or Wholesaler of information?

One model that CCS may consider is the relationship between information wholesaler and information retailers. In this model, CCS can be the information wholesaler that provides authentic climate related information, and technical advice, to a whole range of information retailers that would include disseminators of that information in state, corporate and civil society sectors, as well as the message multipliers.

In such a scenario, CCS would not directly engage the public or the grassroots levels. CCS may occasionally engage in direct outreach activities through the media, in connection with special events such as significant climate change events at national or global levels. The rest of the time, it would be the 'bedrock' wholesaler on which everybody else depends for their information, priorities and technical advice for their own IEC activities.

development agencies as well as certain technical departments or agencies of the state. Many of these knowledge-creating entities also have their own outreach mechanisms. Centralising of climate related IEC work is not possible or desirable.

- The message multipliers (in particular the education system and mass media) have well established and cost-effective systems of disseminating knowledge created by others. Other multipliers, such as civil society groups, also have feedback systems from the community. Again, centralising these outreach/feedback functions in CCS is not realistic.
- As CCS is legally mandated to coordinate Sri Lanka's national climate responses, it can be the key facilitator of IEC processes that use the most current and accurate climate change related information. It can also set priorities for all other stakeholders, consistent with the country's international commitments on climate change.

CCS's role as an 'authenticator' of climate information is critical as there is considerable confusion, misconceptions and deliberate misinformation on climate change, both at national and local levels. An essential precondition for effective IEC is the availability of credible, authoritative information. CCS is uniquely positioned to provide this.

A model for CCS as an information clearinghouse and authenticator is mentioned in Box 2.

8. Resource mobilization

The NCCAS, in its Chapter 4 on Financial Requirements and Implementation Targets, says:

"Adaptation to climate change requires concerted action from many corners of Sri Lankan society including politicians and leaders, government agencies, NGOs, researchers, academia, the private sector, as well as communities and households. The NCCAS is expected to lay a broad framework for coordinating and mobilizing this range of stakeholders around a prioritized framework of action.

"An estimated 47 billion rupees in incremental additional financing, beyond current and ongoing expenditure, will be required to implement the NCCAS over its 6 year duration. This resource pool, which needs to be raised and mobilized, is expected to include investments from Government, international development partners, NGOs, as well as the private sector."

NCCAS contains the following summary of financial resources "expected to be channeled directly to the broad base of agencies and stakeholders (both within Government and beyond), to finance and implement climate change adaptation interventions of varied scale".

Estimated Financing Requirements (LKR million)							
Strategic Thrust	2011	2012	2013	2014	2015	2016	Total
1: Mainstream CC Adaptation into National Planning and Dev't.	50	554	669	637	820	820	3,550
2: Enable Climate Resilient and Healthy Human Settlements	91	496	2,768	2,434	2,398	2,098	10,285
3: Minimize Climate Change Impacts on Food Security	8	183	2,123	1,690	1,755	7,215	12,974
4: Improve Climate Resilience of Key Economic Drivers	160	375	3,765	3,610	3,875	3,375	15,160
5: Safeguard Nat. Resources and Biodiversity from CC Impacts	20	219	279	1,652	1,770	1,790	5,730
Totals	329	1,827	9,604	10,023	10,618	15,298	47,699

Allocations for IEC components are factored into these estimates. A more detailed breakdown, expanded by the IEC-related Priority Adaptation Measures under each Strategic Thrust, is provided in Appendix 9.

The total funding allocation proposed for IEC activities, across the 5 Strategic Thrusts and over the 6 years, is LKR 1,849 million. This is approximately 4% of the overall LKR 47,699 million proposed for climate change adaptation in the NCCAS.

This proportion is well within the internationally accepted range of investment in public education, information and communication activities (averaging 10% of the total cost of a development activity).²

9. Monitoring and Evaluation

The stakeholder institution should be the best judge of what M&E process is best suited for the task they are responsible for. This aspect must be part and parcel of the action plan that the initial dialogues would lead to between the CCS and the stakeholders.

It is recommended to conduct a mid-course review *circa* 2014, and to consider revisions to the implementation plan of this IEC Strategy based on its findings.

² <http://www.fao.org/docrep/t1815e/t1815e03.htm>

10. Communicating Sri Lanka's climate change needs internationally

10.1 Sri Lanka's participation in UNFCCC

Sri Lanka is an active participant in the global and inter-governmental responses to climate change. It was among the first 50 countries to sign and ratify the UNFCCC (in 1993), and later joined the convention's Kyoto Protocol (which commits countries to reduce their collective emissions of greenhouse gases). A Climate Change Secretariat (CCS) was established within the Ministry of Environment to facilitate, formulate and implement projects and programmes at national level. In 2000, Sri Lanka's first National Communication on Climate Change to the UNFCCC³ identified the sectors most vulnerable to climate change and subsequent impacts, the sectors that most contribute to climate change, and the required mitigation options and adaptation responses. The second National Communication to UNFCCC, due to be completed by end 2010, will provide an update -- as do the Sector Vulnerability Profiles developed as part of the NCCAS formulation process.

Sri Lanka's positions in international climate negotiations under the UNFCCC have been broadly consistent with the sub-regional position of the South Asian Association for Regional Cooperation (SAARC). The SAARC Heads of State Summit in 2010 concluded with the Thimphu Declaration on Climate Change, which sets an ambitious goal for South Asia to lead the world in furthering renewable energy, cutting carbon emissions, and reducing poverty while strengthening resilience to climate change.⁴

10.2 South Asian countries projecting their climate vulnerability

Within the common SAARC positions on emissions reductions, however, individual South Asian countries are defining their distinctive or unique positions on climate change vulnerability to engage in financial and technical partnerships with the rest of the world. For example:

- The Maldives has appealed for international assistance to combat sea level rise and intensified storm events that seriously threaten the low lying archipelago.
- Nepal has focused world attention on the fragility of Himalayan mountain ecosystem to raised temperatures that trigger drastic hydro-ecological change.
- Bangladesh is making a strong case for global assistance to cope with the rising sea levels that threaten to flood a third of its land area, and to cope with increased threat of flooding due to changes upstream in the Himalayan ecosystem.

As more climate change related financing becomes available from UNFCCC process, multilateral agencies, bilateral aid agencies as well as private funding sources, developing

³ <http://unfccc.int/resource/docs/natc/srinc1.pdf>

⁴ <http://www.saarc-sec.org/userfiles/16thSummit-Declaration29April10.pdf>

countries would likely compete more vigorously to attract larger shares of these funds and investments by projecting their unique selling propositions. Among the more visible examples of such posturing was the Maldives holding the world's first underwater Cabinet meeting and Nepali Cabinet ministers meeting at a high elevation close to Mount Everest, both in 2009.

10.3 Sri Lanka's Unique Selling Proposition on climate change

As the technical analysis and stakeholder consultations leading to the NCCAS have reaffirmed, climate change would produce major impacts on Sri Lanka's natural resources, economic activity and people's well being. In an inter-dependent global economy, climate impacts elsewhere (for example on countries from where Sri Lanka imports oil or food) can also produce significant ripple effects on the country.

Yet, Sri Lanka is not among the 51 small island developing state (SIDS) as listed by the United Nations.⁵ It is also not among the 49 Least Developed Countries (LDCs) with per capita gross national incomes below USD 905 and other economic vulnerabilities.⁶ As a lower middle income country with a resurgent economy, Sri Lanka will need to define its climate adaptation needs in terms other than strict physical or socio-economic vulnerabilities.

What could be Sri Lanka's unique proposition to the rest of the international community *vis-à-vis* climate change vulnerability and climate adaptation needs?

In defining its own 'unique selling proposition', Sri Lanka will need to answer these questions:

- What is unique in Sri Lanka that is also part of humanity's natural and/or cultural heritage?
- How is that heritage threatened or endangered by climate change impacts?
- Are climate impacts likely to degrade or destroy this irreplaceable asset?
- Is Sri Lanka able to protect and safeguard this asset on its own effort and resources?
- How can the rest of the world community partner with Sri Lanka in this endeavour?

In an initial analysis, Sri Lanka's high biodiversity emerges as one unique factor: the island has an impressively high number of plant and animal species for its relatively small land area; many of them are endemic, i.e. found nowhere else in the world.

It would be in Sri Lanka's enlightened self interest to further explore this aspect, and define a vision and a plan on how the country wishes to position and project itself internationally in terms of climate change vulnerability, adaptation needs and partnerships. Good external communications would be needed to implement that vision.

⁵ <http://www.un.org/esa/sustdev/sids/sidslist.htm>

⁶ <http://www.un.org/special-rep/ohrlls/lcd/lcd%20criteria.htm>

11. Conclusion

This Strategy provides a framework for IEC and awareness activities that will form an integral part of Sri Lanka's climate change adaptation process.

In reality, changing attitudes and behaviour is a long-drawn, gradual process which requires sustained engagement. For practical purposes, this strategy is confined to six years, 2011-2016. However, it is hoped that stakeholder engagement through IEC interventions will continue well beyond that initial period, to contribute to the on-going needs of climate change adaptation.

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APPENDICES

Appendix 1: Working Group on IEC Strategy Preparation

Appendix 2: Public Perceptions on Climate Change in Sri Lanka: Summary of Findings

Appendix 3: Lessons Learnt from Mainstreaming Disaster Risk Reduction in Sri Lanka

Appendix 4: IEC matrix for Strategic Thrust 1

Appendix 5: IEC matrix for Strategic Thrust 2

Appendix 6: IEC matrix for Strategic Thrust 3

Appendix 7: IEC matrix for Strategic Thrust 4

Appendix 8: IEC matrix for Strategic Thrust 5

Appendix 9: Estimated Financing Requirements

Informal Working Group on Communication Strategy

The Informal Working Group (IWG) on Communication Strategy process comprised a few professionals drawn from education, media and mass communication backgrounds, each serving in personal capacity.

The group had the following Terms of Reference:

- Informally discuss and guide the IEC strategy preparation process;
- Review and comment on the emerging draft IEC strategy;
- Meet at least 4 times during the process; and
- Be willing and available to be consulted between meetings by email/phone.

Members:

- Dr Hiran Amarasekera, Head, Department of Forestry and Environment Science, University of Sri Jayawardenapura
- Asoka Dias, Country Representative, Asian Media Information and Communication Centre (AMIC)
- Ms Dilrukshi Handunnetti, environmental journalist
- Ms Ramona Miranda, Head of Communication, Practical Action South Asia
- Nimal Perera, Independent Consultant
- Malaka Rodrigo, environmental journalist, climate reporter and blogger
- Ms Sandya Salgado, Chief Executive Officer, Ogilvy Action
- Dr Jayantha Wattavidanage, Senior Lecturer, Open University of Sri Lanka

Ex-officio

- Dr W L Sumathipala, Chief Technical Advisor, Climate Change Secretariat
- Ms Anoja Herath, Assistant Director, Climate Change Secretariat
- Nayana Mawilmada - Project Team Leader
- Dr Sithara Atapattu - Project Deputy Team Leader
- Dr Jinie Dela - Project Environmental Specialist

Co-convenors:

- Dr Buddhi Weerasinghe, Project Consultant
- Nalaka Gunawardene, Project Consultant

The group met twice during the consultative period, and several of its members were also involved in the wider stakeholder consultations involving the preparation of Sector Vulnerability Profiles (SVPs) for the overall NCCAS.

Public Perceptions on Climate Change in Sri Lanka: Summary of Findings of 2010 Survey

- A vast majority of Sri Lankans - nearly 9 out of 10 across the country -- have heard of climate change or global warming.
- Among them, 36% are 'strongly concerned', while another 57% are 'somewhat concerned' about how climate change can personally affect themselves and their families. The impacts they most fear are water and food shortages, and the spread of diseases due to weather anomalies.
- Yet, hopefully, many believe that 'there is still a chance to prevent the worst impacts - if we act fast'. They feel that both the government and people should be involved in responding to the climate crisis, and in taking better care of the environment.
- Among the most favoured climate-friendly actions are tree planting, forest conservation and proper disposal of waste.
- 'Not having enough technical or specific information' is the biggest reason for non-action by those who are concerned about climate change and want to do something about it.
- Most people had first heard about climate change from the mass media or in school. The media is also the most popular source for more information on what can be done on climate change and how to do it. The next most preferred sources are state agencies dealing with the subject, and people's own peer circles.

These are among the key findings of a country-wide survey on public perceptions on climate change, conducted in early and mid 2010. The survey covered 1,000 men and women aged above 18 years, in urban and rural areas across all 25 districts of Sri Lanka.

The overall aim of the survey was to map out perceptions and opinions among ordinary Sri Lankan people on changes in their environment, and to find out how aware they were about climate change. It did not try to assess or evaluate any individual's factual knowledge on the subject. The survey has captured impressionistic views of the voluntarily participating respondents. These are broadly indicative of the current levels of understanding, or the lack of it, on various changes in weather, climate and physical environment.

This is only a summary. The full survey report - with the detailed results, analysis and graphs - is separately available and already in the public domain.

Sample characteristics

- 1,000 respondents, spread across all 25 districts of Sri Lanka
- Urban households: 144; Rural households: 856
- Wet Zone households: 42%; Intermediate Zone: 31%; Dry Zone: 27%
- Gender of respondents: 54% women; 46% men
- Average age of respondent: 40 years
- Average respondent has had 10 years of formal schooling
- A little over 50% of all respondents are wage-earners
- Total (claimed) income of average sample household: LKR 22,600 (approx. USD 200) per month

The survey tried to discern the broad trends in how respondents:

- perceived the issue of climate change (if they are aware of it at all);
- positioned it within context of current issues and concerns (national, local);
- positioned it alongside other environment related issues and concerns;
- related climate change to their lives, lifestyles, current and future prospects;
- felt what responses or actions should be taken, and by whom; and
- considered personally acting in response to climate change.

The key findings are presented here. (Note: The questions used in this document as sub-headings are not the survey questions. The survey questionnaire is given the full report.)

Have you felt changes in the local environment?

Only those who have lived in the same district for at least 10 years (915 persons out of total 1,000) were asked for their impressions and memories on local level changes in rainfall, temperature and drought conditions.

- Nearly two thirds (64%) felt that the rains are no longer received on time in their areas. This observation was the highest in Southern, Uva, Sabaragamuwa and North-western Provinces.
- A little over half (57%) also said they have been experiencing unusually heavy rainfall (high volume of rain in a short period of time) in their areas.
- Nine out of 10 persons in all parts of the country felt that their day to day temperatures are higher today than what they remember in the past.
- Overall, more than 3 out of 5 respondents (61%) said they have recently experienced drought conditions in their areas. The percentage was higher among rural residents, and among those living in the Dry and Intermediate Zones of the country.

- Among those who have experienced drought, a majority (80%) felt such droughts are occurring more often now than 5 to 10 years ago. Again, this perception was more widely expressed by those living rural areas as well as those in the Dry and Intermediate Zones. Most of them also felt that droughts today last for longer periods than in the past.
- People offered various explanations on why the rainfall, temperature and other natural factors have changed significantly. The most cited reason, expressed by nearly three quarters of the sample (74%), was deforestation (covering timber extraction, forest land clearing, forest fires and species extinction). Other factors held responsible included air pollution from vehicles and factories, development projects and construction activity, population growth, and pollution. (Multiple answers were allowed.)

Have you heard of climate change?

- Most people in the survey sample said they have heard of climate change and/or global warming: 882 (88%) had heard of 'climate change'; 79% also recognised the term 'global warming'. This was so among both urban and rural residents, and across the different income levels.
- A little over 91% of those who claimed to know about climate change agreed that 'climate change is caused by man-made global warming'. Only 4% disagreed with this statement, while the remaining 5% was undecided.
- Most people had first heard about climate change from the mass media or in school, which, between them, accounted for 95% of the information sources.
- Those who have heard of climate change were probed further about what they mentally associate it with. Many thought of water shortages; less food being grown; and an increase in diseases and epidemics. Other impacts -- such as increases in floods, droughts and cyclones, and disruptions in rainfall patterns and seasons -- figured less prominently.
- Water and food shortages, and health problems triggered by abnormal weather also dominated the rankings when climate-aware people were shown a suggested list of possible impacts and asked to choose the ones that most concerned them.

Who and what is responsible for climate change?

- Asked for their opinion on who or what was principally responsible for climate change, nearly three quarters (73%) of people -- from all parts of the country, and across the income groups -- chose developed countries as their top answer. This was followed by factory owners (67%), while almost as many (66%) acknowledged that all human beings,

both the rich and poor, share the responsibility. (Respondents could choose multiple answers from among 7; they were also allowed to suggest more answers of their own.)

- Different individuals held widely different views when asked about the primary cause or reason for accelerated climate change. The three most widely cited factors were air pollution, loss of forest cover and damage to the ozone layer. These rankings did not change by income level or geographical location. Significant numbers also attributed climate change to the burning of coal and petroleum, and growing human numbers.

What can climate change do to us?

- Almost 9 in 10 sample members (88%) believe that they are going to be personally affected by climate change. Remarkably, this belief is held strongly -- and to the same intensity -- by everyone irrespective of their location or income level. Such people expect the 'spread of disease' and 'water shortages' to hit them the hardest, while many among them also worry that their incomes and livelihoods from agriculture could soon be at risk.
- Among the 882 people who have heard of climate change, 36% said they are 'strongly concerned' about it; another 57% are 'somewhat concerned'. Of the balance, 4% were not concerned while 3% could not decide. (They had to choose one of these four answers.)

What can we do about climate change?

- Those who were 'strongly' or 'somewhat' concerned about climate change were further asked if they believed something can and should be done: 78% of them readily agreed.
- Seven out of 10 of such agreeing people remained optimistic and felt that 'there is still a chance to prevent the worst impacts if we act fast'. Another 22% agreed with the notion that 'there is still a slim chance to overcome/reduce adverse impacts'. Of the balance, 7% held that 'it is too late now to prevent drastic consequences' while 1% believed that 'Nature will heal on its own'.
- The optimists were given a chance to list any climate-friendly action of their choice. A vast majority (72%) suggested planting trees and increasing the country's forest cover. It was followed by forest conservation (43%) and maintaining a clean environment through proper waste disposal (19%). Other responses were wide and varied. but did not add up to statistically significant levels.

Who should take action?

- Asked who should take such action, the top answers were: my local community (79%); national government (78%); me and my family (77%). Smaller but still significant numbers believed that action should be taken by their local government body (55%); Provincial administration (47%); or the United Nations at a global level (42%). Here too, multiple answers were allowed.

What prevents you from acting against climate change?

- Those who were concerned about climate change, and wanted to do something about it personally, were questioned further why they have not acted. The single biggest reason (83%): not having enough technical information. This was followed by: changes or actions are too costly; some actions are not practical or feasible in the person's location; and not having enough time for personal involvement.
- Where would such persons look for more specific and practical information? The top three preferred sources are the mass media, relevant state agencies and their own peers (friends, neighbours and colleagues).

ADDITIONAL INSIGHTS

For greater context, the survey also asked a few questions about people's overall perceptions on the environment, and their general information sources and preferences.

Where does environment rank in people's overall concerns?

- Environment ranked as the seventh (7th) most pressing overall *national level* problem for the survey participants. The higher ranked issues were: 1. cost of living; 2. unemployment; 3. poverty; 4. corruption; 5. narcotics and alcohol abuse; and 6. access to healthcare.
- Among a set of nine prompted responses, where people were allowed multiple answers, only two issues were ranked below 'environment': the ethnic issue and access to housing and land. These rankings did not change significantly when analysed by the respondents' income level or their geographical location.
- When asked to list the most pressing *local level* problems, the same respondents listed environment at the eighth (8th) place, above only the ethnic issue. The ranking of the top three problems did not change at national and local levels; they remained as cost of living; unemployment; and poverty.

- The link between environmental degradation and ill health mattered more than any other environmental issue or problem: it was the most highly ranked by both urban (87%) and rural (81%) people. Water quality, loss of forest cover, air pollution and disaster impacts were the next most important environmental issues in set of 9 prompted answers (where an individual could select up to 5 and assign ranks).
- More than a third (37%) of all people said that environmental problems in their areas have become worse during the last decade. This compared with 29% who felt the problems have remained the same, and another 24% who believed these had, in fact, improved. (The remaining 10% was undecided.) Analysed by their location, more city dwellers (41%) felt problems have become worse than did rural residents.

What are people's key sources of information on current issues?

- The mass media are the major source of public information on current news and affairs for both urban and rural households. Television was the single most popular source cited by the highest number of respondents (94%), followed by radio (74%) and newspapers and magazines (70%). There was no significant urban/rural difference in these responses.
- The next most widely cited information source was friends, neighbours and colleagues. But interestingly, while 52% of all respondents listed this category, only very few (2%) acknowledged it as a *credible* source. In contrast, the credibility factor was higher for TV (88%), radio (42%) and print media (33%).
- Educational institutions (schools, universities and training centres) were assigned a very low rank as a source (7%) and even lower status as a credible source (3%).
- Although only 9% of the respondents cited the Internet as a regular source of information for themselves, its perception as a credible source was considerably high (51%). This makes the Internet the second most trusted source for the sample, behind only TV.

Note: This survey was commissioned under the ADB Technical Assistance Project TA 7326 (SRI), titled 'Strengthening Capacity for Climate Change Adaptation', based at Climate Change Secretariat, Ministry of Environment, Sri Lanka. The survey was carried out by the reputed market research company, Survey Research Lanka (Pvt) Limited, under the technical supervision of Nalaka Gunawardene and Buddhi Weerasinghe, Communication Specialists of the Project. The process was administratively facilitated by TVE Asia Pacific.

This summary, as well as the full survey report, are in the public domain and may be quoted or referenced. Recommended citation:

ADB/MoE, 2010. Survey on Public Perceptions of Climate Change in Sri Lanka

Promoting a new paradigm in Sri Lanka: Lessons Learnt from Mainstreaming Disaster Risk Reduction (DRR)

Until the Indian Ocean Tsunami occurred in December 2004, Sri Lanka's Disaster Management paradigm was focused mostly on disaster relief and response. The state channeled these through the Ministry of Social Welfare, with the armed forces mobilized where needed for relief operations. Civil society activities by the Red Cross and few other players had similar emphasis on post-event response. The tsunami's unprecedented scale and destruction showed the gross inadequacy of these arrangements.

After the tsunami, the overall challenge was to introduce a legal and institutional framework for disaster management to promote a culture of disaster risk reduction (DRR) involving the elements of early warning, preparedness, mitigation and effective response, reconstruction and rehabilitation.

The following was accomplished during 2005:

- Sri Lanka Disaster Management Act No. 13 of 2005 was enacted.
- The National Council for Disaster Management, chaired by the President, was established to coordinate disaster risk management as provided by the Act.
- The Disaster Management Center (DMC) was established as its executing agency.

Other institutional arrangements also evolved. A National Policy for Disaster Risk Management (DRM) in Sri Lanka was formulated following a consultative process with all stakeholders. District-level Disaster Management Coordinating Units of the DMC have been established as a mechanism to devolve disaster management activities. A National Disaster Management Coordination Committee (NDMCC) has been set up, with the DMC as its convener. This is a national platform to coordinate action amongst all stakeholders and to ensure the implementation of the Hyogo Framework for Action (HFA) that has been globally adopted under the United Nations to build resilience of nations and communities to disasters.

Lessons Learnt

- **Countering resistance to a new paradigm:** It was difficult to switch from post-disaster response to pre-disaster risk reduction. The concept was new to Sri Lanka. The number of stakeholders involved was large and they were spread across many sectors. Policies of most stakeholder institutions had no DRR perspective. Few people recognized the need for change. Although the tsunami opened up a window of opportunity for DRR, generating a critical mass for change was still an enormous challenge.

- **Influencing Policy:** Influencing policy involved having tightly-focused small group discussions and following up with key stakeholders. One example of successful policy change is the National Policy of Local Government (NPLG, published in Gazette No. 1632/26 in December 2009). This gave a mandate to local government bodies in DRR and disaster management. Although scattered provisions were found in the relevant laws, these related more to the provision of services. A collaboration of the Ministry of Local Government, DMC and Asian Disaster Preparedness Centre (ADPC) through small group consultation of selected stakeholders led to the formulation of the new NPLG. Another example is the integration of DRR considerations into physical planning. The National Physical Planning Policy & Plan (NPP&P), formulated by the National Physical Planning Department and implemented by Urban Development Authority (UDA), has recently integrated consideration of flood and landslide risks. Such policy changes are essential first steps in mainstreaming a new paradigm.
- **Influencing action:** Influencing action is even harder. Nearly one year after the NLGP's publication, awareness about it is still low at local government level. This was revealed during a capacity building efforts by the DMC, the Federation of Local Government Authorities and Practical Action for employees and elected members of these bodies. Participants called for small group sessions to influence action and create the political will at the grassroots.
- **Adapting existing communication modes:** Traditional awareness methods such as brochures, posters and newsletters had more success with school children and segments of the public. Most mass media practitioners tended to focus on the sensationalism of disaster reporting... The number of deaths and the havoc caused. More balanced reporting had to be cultivated. An annual award for "Excellence in Disaster Reporting" that takes place during the commemoration of the National Safety Day every December has motivated media professionals to cover DRR and disaster management issues with a broader and deeper understanding.

The overall lesson is that there are no 'quick-fixes' to mainstream a new paradigm. Influencing policy and practice has to be the forerunner of genuine paradigm shift. It is best accomplished through small group discussions of stakeholders, engaged over time.

More than five years on, that process is still continuing in DRR. Lessons learnt in that time have prompted amendments to the Disaster Management Act which are being discussed with stakeholders as at late 2010.

CCA STRATEGIC THRUST 1:

Mainstream Climate Change Adaptation into National Planning and Development

IEC Thrust for Primary Audience

Promote linkages and champions

Influence policy Influence practice

Promote Monitoring and Evaluation

Linkages & Policy Target Institutions	Key Message/s (Concept only; not the final wording for delivery)	Delivery Mode/s	Measurable Outcome/s	Timeline
<p>1.1. National Planning</p> <ul style="list-style-type: none"> National Planning Department (NPD) 	<p>→• Potential vulnerabilities and risks of investments and need for DRR and CC resilience considerations in the National Planning process</p>	<p>Through consensus between Ministers in charge of Finance, Environment and Disaster Management, initiate an agenda of small group discussions with NPD</p>	<p>Economic development policies, strategies, programs and project appraisal reviewed and amended to include DRR and CCA considerations <i>Cross linked to 1.6. Research</i></p>	<p>1-2 years Periodic Review</p>
<p>1.2. Physical Planning & Development</p> <ul style="list-style-type: none"> National Physical Planning Department (NPPD) Urban Development Authority (UDA) Land Use Policy Planning Division (LUPDD) 	<p>→• Necessity to focus on Potential vulnerabilities of investments and need for DRR and CC impact resilience considerations in the National Physical Planning Policy & Plan (NPP&P). →• Consideration of prospective and corrective risk reduction and CCA in urban planning and development</p>	<p>Through consensus between Ministers in charge of NPPD, UDA, Environment and Disaster Management, initiate an agenda of small group discussions with NPPD / UDA</p>	<p>NPP & P reviewed and amended to include DRR and CCA considerations Urban land use policy, development planning and capital investment planning processes reviewed and amended to include DRR and CCA considerations for integrated urban planning and physical development <i>Cross linked to 1.6. Research</i></p>	<p>1-2 years Periodic Review</p>
<p>1.3. Environmental Assessment in Development</p> <ul style="list-style-type: none"> Central Environment Authority (CEA) 	<p>→• Consideration of CC and DRR concerns in SEA/EIA processes and strengthen related monitoring and evaluation framework</p>	<p>Minister of Environment to advocate CEA to review SEA / EIA processes in small group discussions with relevant stakeholders</p>	<p>SEA/EIA processes reviewed and DRR / CC considerations integrated. <i>Cross linked to 1.6. Research</i></p>	<p>1-2 years</p>
<p>1.4. Renewable Energy</p> <ul style="list-style-type: none"> Sri Lanka Sustainable Energy Authority 	<p>→• National need for development of renewable energy sources</p>	<p>Minister of Energy to initiate an agenda of small group Discussions.</p>	<p>Action Plan for development of renewable energy sources formulated</p>	<p>1 year</p>
<p>1.5. Up scaling DRR</p> <ul style="list-style-type: none"> Disaster Management Center (DMC) 	<p>→• Need to upscale DRR measures to mitigate possible escalation of disaster impact due to CC</p>	<p>National Disaster Management Council to deliberate and commission necessary action</p>	<p>National Disaster Management Policy and Plan amended to consider up-scaling of DRR measures <i>Cross linked to 1.6. Research</i></p>	<p>1 year Periodic Review</p>

Knowledge Construction Target Institution	Key Message/s (Concept only; not the final wording for delivery)	Delivery Mode/s	Measurable Outcome/s	Timeline
<p>1.6. Research</p> <ul style="list-style-type: none"> • Department of Agriculture • Hector Kobbekaduwa Agrarian Research and Training Institute • Sri Lanka Council for Agricultural Research Policy • Department of Animal Production and Health • Tea Research Institute • Coconut Research Institute • Rubber Research Institute • Sugar Cane Research Institute • National Aquaculture Development Authority (NAQDA) • Institute of Policy Studies (IPS) • National Research Council (NRC) • Institute of Fundamental Studies (IFS) • National Engineering Research and Development Centre (NERD) • National Science Foundation (NSF) • Industrial Technology Institute (ITI) • University Grants Commission (UGC) & Universities • Department of Meteorology • National Building Research Organization (NBRO) • Disaster Management Center (DMC) • National Aquatic Resources Development Center (NARA) • Coast Conservation Department (CCD) • Sri Lanka Foundation Institute (SLFI) 	<p>–• Need and responsibility for research on impact of climate change and the dissemination of newly acquired knowledge on CC impact to give direction to adaptation strategies.</p>	<p>In consensus with the Ministers in charge of the listed Target Institutes, Convene a national research forum to set up a research agenda and assign relevant institutes the facilitation and conduct of research in thematic areas.</p>	<p>A State-of-the-art knowledge hub on climate change impacts and adaptations established</p> <p>Models, downscaled climate projections and possible impact scenarios established.</p> <p>Research work published and disseminated.</p>	<p>Forum convened within 3 months</p> <p>Research agenda over a Long Term Period with biennial conference Convened.</p>

Promote information and awareness dissemination				
Mass Media Target Institution/s	Key Message/s (Concept only; not the final wording for delivery)	Delivery Mode/s	Measurable Outcome/s	Timeline
1.7. Role of Mass Media <ul style="list-style-type: none"> • Department of Information • Sri Lanka Broadcasting Corporation (SLBC) • Sri Lanka Rupavahini Corporation (SLRC) • Independent Television Network (ITN) • Associated Newspapers of Ceylon Ltd. (ANCL) • Private Media Institutions (print, broadcast, web) 	<ul style="list-style-type: none"> –• National need for allocating air time and resources for public service broadcasting on DRR and CCA 	Through consensus between Ministers in charge of Media, Environment and Disaster Management, initiate an agenda of small group discussions with Heads of Media Institutions	Public Service Broadcasting time and resources for DRR and CCA negotiated and established Cross linked to 1.6. Research	6 months
Mobilize resources				
1.8. Funding <ul style="list-style-type: none"> • Donors 	<ul style="list-style-type: none"> –• The need to protect post-war investments and social development in rehabilitating North and East; –• The need to conserve the globally significant biodiversity in Sri Lanka 	High Level Forum of donors Bilateral negotiations.	Funding for CCA strategy pledged and a time frame formulated	1-2 years
Create political will				
1.9. Governance <ul style="list-style-type: none"> • Provincial Councils 	<ul style="list-style-type: none"> –• Need for implementation of National Policies for integrating DRR and CCA in development planning 	Deliberation at a Forum of Provincial Governors and Chief Ministers	Provincial Charters on mainstreaming DRR and CCA in development enacted	Forum convened within 6 months. Charters enacted within 2 years.

IEC Thrust for Secondary Audiences

Promote linkages and champions

Influence practice

Promote Monitoring and Evaluation

Target Institutions	Key Message/s (Concept only; not the final wording for delivery)	Delivery Mode/s	Measurable Outcome/s	Timeline
<p>1.10. Sub national Administrators</p> <ul style="list-style-type: none"> • All District Secretariats • All Divisional Secretariats 	<p>–• Need to monitor all development work to ensure implementation of national policy and guidelines for integrating DRR and CCA in development</p>	<p>Small group discussions with District / Divisional Secretaries followed by capacity building workshops for institutional staff</p>	<p>Feasible mechanisms in place for monitoring and reporting</p>	<p>1-2 years Consequently repeated for new staff</p>
<p>1.11. Political hierarchy</p> <ul style="list-style-type: none"> • Local Government Institutions • Sri Lanka Institute of Local Governance 	<p>–• Need to monitor all development work to ensure implementation of national policy and guidelines for integrating DRR and CCA in development</p>	<p>Small group discussions with Mayors / Chairmen of local Governance bodies and capacity building workshops for institutional Officers & elected members</p>	<p>Provincial charter for DRR and CCA integrated to local level planning</p>	<p>1-2 years Consequently Repeated after local government elections</p>
<p>Empower children and youth as social animators of change</p>				
<p>1.12. Education</p> <ul style="list-style-type: none"> • National Institute of Education (NIE) • National Authority on Teacher Education (NATE) 	<p>–• Advocacy for incorporation of CCA studies in project work thereby empowering school children to be animators of attitudinal change.</p>	<p>Capacity building workshops for Teacher Trainers and Teachers</p>	<p>CCA studies integrated for school project work. CCA studies integrated with school curriculum beyond the current Grade 10 Geography syllabus Posters, booklets and audio-visual materials developed. Web resources developed Cross linked to 1.6. Research</p>	<p>1-5 years Periodic review</p>
<ul style="list-style-type: none"> • Tertiary and Vocational Education Commission • Vocational Training Authority of Sri Lanka • National Institute of Technical Education (NITA) • Universities 	<p>–• Need to integrate technological innovations in the construction industry to build CC resilience</p>	<p>Seminars for curriculum developers and Heads of Departments</p>	<p>CCA studies integrated with curriculum Dissertations compiled on CCA Access to a State - of -the- Art knowledge hub on climate change impacts and adaptations Cross linked to 1.6. Research</p>	<p>1-5 years Periodic Review</p>

Enable Climate Resilient and Healthy Human Settlements

IEC Thrust for Primary Audience

*Promote linkages and champions**Influence Policy**Influence practice**Promote Monitoring and Evaluation*

National Policy Target Institutions	Key Message/s (Concept only; not the final wording for delivery)	Delivery Mode/s	Measurable Outcome/s	Timeline
2.1. Cross linked to 5.1. Water Resource Management	–• Necessity for an Integrated Water Resource Management (IWRM) policy	Cross linked to 5.1. Water Resource Management	Mechanisms for adequate quality and quantity of water supply for human established Cross linked to 5.1. Water Resource Management	1-5 years
2.2. Human Settlement Planning Cross linked to 1.1 and 1.2 • National Housing Development Authority (NHDA)	–• Need to develop human settlements in order to be able to cope with climate change impacts	Cross linked to 1.1 and 1.2	Research based scenarios deliberated to formulate adaptation strategies for human settlements to cope with potential CC impact Cross linked to 1.6. Research	1-5 years
2.3. Health • Department of Health	–• Need to establish proactive measures to prevent spread of epidemics	Dialogue with stakeholders carried out and Research forum established	Guidelines established to prevent epidemics in human settlements and awareness created. Cross linked to 1.6. Research	1-3 years
2.4. Risk Transfer • Insurance Sector	–• Need for enhanced insurance to mitigate losses due to climate change impacts	Convene a national forum of insurance and re-insurance stakeholders to formulate a policy for enhanced risk transfer for household level impacts of CC	Risk Transfer mechanisms and compatible building construction guidelines established and awareness created. Cross linked to 1.6. Research	1 -10 years

Policy Implementation Target Institutions	Key Message/s (Concept only; not the final wording for delivery)	Delivery Mode/s	Measurable Outcome/s	Timeline
<p>2.5. Human Settlement Services</p> <ul style="list-style-type: none"> Local Government Bodies 	<ul style="list-style-type: none"> Necessity to compile By-laws and regulations for the Local Government Policy in order to integrate CC Necessity to be proactive in planning provision of services to be able to cope up with extreme events due to CC impact 	<p>Small group discussions with stakeholders to map land use and sensitive areas to identify prospective and corrective DRR measures to face CC</p> <p>(Pilot study available with UDA and Practical Action)</p> <p>Capacity building of technical staff</p>	<p>Partnerships and a strategy established to implement DRR measures in human settlement areas to cope with CC</p> <p>Cross linked to 1.6. Research</p>	<p>1-2 years</p>
<p>IEC Thrust for Secondary Audiences</p> <p>Promote linkages and champions</p> <p>Influence practice</p>				
<p>2.6.. Settlement based interventions</p> <ul style="list-style-type: none"> Communities 	<ul style="list-style-type: none"> Awareness of cause-effect relationships and the long term impacts on safety of settlements due to climate change 	<p>Community group gatherings in collaboration with CBOs, NGOs to formulate community based initiatives for safe practices.</p> <p>Cross linked to 2.5. Human Settlement Services</p>	<p>A series of pilot demonstration projects formulated and implemented and promoted for replication.</p> <p>Cross linked to 1.6. Research</p>	<p>1-5 years</p>

**CCA STRATEGIC THRUST 3:
Minimize Climate Change Impacts on Food Security**

APPENDIX 6

IEC Thrust for Primary Audience
Promote linkages and champions
Influence Policy
Influence practice
Promote Monitoring and Evaluation

National Policy Target Institutions	Key Message/s (Concept only; not the final wording for delivery)	Delivery Mode/s	Measurable Outcome/s	Timeline
3.1. <i>Cross linked to 5.1. Water Resource Management</i>	–• Necessity for an Integrated Water Resource Management (IWRM) policy	<i>Cross linked to 5.1. Water Resource Management</i>	Mechanisms for adequate quality and quantity of water supply for agriculture established <i>Cross linked to 5.1. Water Resource Management</i>	1-5 years
3.2. <i>Fishery</i> • Department of Fisheries • NAQDA • CCD	–• Need to develop potential scenarios based on research to understand probable impact on inland and marine fishery	National forum of stakeholders to discuss and deliberate research based scenarios and formulate possible adaptation strategies	Research based scenarios deliberated to formulate adaptation strategies for coastal inundation and impact on fishery sector. <i>Cross linked to 1.6. Research</i>	1-10 years
3.3. <i>Inland Fishery</i> • NAQDA	–• Need to establish inland fishery culture sustainable in minimal water availability. (Some good practices are available from AIT, Thailand.)	Dialogue with stakeholders carried out and Research forum established	Potential aqua culture methods defined for pilot projects <i>Cross linked to 1.6. Research</i>	1-5 years
3.4. <i>Risk Transfer</i> • Insurance Sector	–• Need for enhanced crop / livestock insurance to combat climate change impacts	Convene a national forum of insurance and re-insurance stakeholders to formulate a policy for enhanced risk transfer in the agriculture sector to mitigate CC impact.	Risk Transfer mechanisms established and awareness created.	1 year
3.5. <i>Breeding New Varieties</i> • Department of Agriculture • Department of livestock development	–• Need to breed new varieties and study value chains for new varieties	Dialogue with research partners and other stakeholders to formulate strategy	Value chains studied and markets established for new varieties <i>Cross linked to 1.6. Research</i>	10 years

Policy Implementation Target Institutions	Key Message/s (Concept only; not the final wording for delivery)	Delivery Mode/s	Measurable Outcome/s	Timeline
3.6. Relief after extreme events • Department of Agriculture	–• Necessity to provide relief to farmers in the event of erratic rain fall affecting crops	Convene a national forum of NGOs and civil society organizations to formulate a strategy of how to provide seed stock to farmers in the event of erratic rainfall events.	Partnerships and a strategy established to relieve farmers with seed stock consequent to erratic rainfall events.	Forum convened within 1 year

IEC Thrust for Secondary Audiences				
<i>Promote linkages and champions</i>				
<i>Influence practice</i>				
3.7. Community based interventions • Farming Communities Discriminated according to crop types	–• Awareness of cause-effect relationships and the long term impacts on livelihoods due to climate change and the necessity for water saving practices as adaptation.	Community group gatherings in collaboration with CBOs, NGOs to formulate community based initiatives for water saving practices. Some such best practices are already available from NGO interventions.	A series of pilot demonstration projects formulated and implemented and promoted for replication. Cross linked to 1.6. Research	1-5 years
• Farming Communities Discriminated according to crop / livestock types	–• Need for new crop / livestock varieties that can withstand climate change	Community group gatherings in collaboration with CBOs, NGOs to formulate community based initiatives for trials on new varieties.	Pilot demonstration projects for trying out new varieties implemented and promoted for replication. Cross linked to 1.6. Research	1-5 years
3.8. Capacity Building for Extension Work • Divisional level Field Staff	–• Awareness and know-how on how to provide guidance to communities on relevant adaptation strategies to safeguard food security.	Capacity building interventions for officers at Divisional Secretariat level	Potential adaptation strategies disseminated and capacity built for extension work carried out enabling implementation of demonstration projects. Cross linked to 1.6. Research	1-5 years

Improve Climate Resilience of Key Economic Drivers

IEC Thrust for Primary Audience

*Promote linkages and champions**Influence Policy**Influence practice**Promote Monitoring and Evaluation*

National Policy Target Institutions	Key Message/s (Concept only; not the final wording for delivery)	Delivery Mode/s	Measurable Outcome/s	Timeline
4.1. CC Resilient Infrastructure <ul style="list-style-type: none"> Economic Infrastructure Division under Finance Road Development Authority Department of Sri Lanka Railways 	<ul style="list-style-type: none"> Necessity to safeguard investment in infrastructure from unexpected extreme events due to CC 	National forum of stakeholders to discuss and deliberate research based scenarios and formulate possible adaptation strategies	Guidelines developed for infrastructure planning to integrate DRR and CC. <i>Cross linked to 1.6. Research</i>	1-2 years
<ul style="list-style-type: none"> Sri Lanka Tourism Development Authority Hoteliers 	<ul style="list-style-type: none"> Necessity to safeguard investment in tourism infrastructure from unexpected extreme events due to CC 	National forum of stakeholders to discuss and deliberate research based scenarios and formulate possible adaptation strategies	Guidelines developed for hotel infrastructure planning to integrate DRR and CC. <i>Cross linked to 1.6. Research</i>	1-3years
4.2. Plantation Sector Resilience <ul style="list-style-type: none"> Sri Lanka State Plantation Corporation Tea Research Institute Coconut Research Institute Rubber Research Institute Sugar Cane Research Institute Faculties of Agriculture 	<ul style="list-style-type: none"> Necessity to assess impact of CC on productivity and need for potential adaptation strategies 	National forum of stakeholders to discuss and deliberate research based scenarios and formulate possible adaptation strategies. Small groups convened for awareness raising on strategies <ul style="list-style-type: none"> Plantation Companies Small Holder Sectors Small Farmers 	Crop specific adaptation strategies formulated <i>Cross linked to 1.6. Research</i> Awareness created for <ul style="list-style-type: none"> Plantation Companies Small Holder Sectors Small Farmers 	1-3 years
4.3. Risk Transfer <ul style="list-style-type: none"> Insurance Sector 	<ul style="list-style-type: none"> Need for enhanced plantation / Industrial insurance strategies to combat climate change impacts 	Convene a national forum of stakeholders to formulate a policy for enhanced risk transfer in the Plantation/ industrial sector for CC impact.	Risk Transfer mechanisms established and awareness created. <i>Cross linked to 1.6. Research</i>	1 year

Policy Implementation Target Institutions	Key Message/s (Concept only; not the final wording for delivery)	Delivery Mode/s	Measurable Outcome/s	Timeline
4.4. Field testing <ul style="list-style-type: none"> • Plantation Companies • Small Holder Sectors 	<ul style="list-style-type: none"> –• Necessity to integrate CC adaptation in crop plantations 	Crop specific small group discussions of planters to formulate pilot projects to test out recommended adaptation strategies	Crop specific pilot projects implemented in different agro-zones, evaluated and findings disseminated.	1-5 years

IEC Thrust for Secondary Audiences				
<i>Promote linkages and champions</i>				
<i>Influence practice</i>				
<ul style="list-style-type: none"> • Small Farmers of spices <p>Discriminated according to crop type</p>	<ul style="list-style-type: none"> –• Need to consider impact of CC on their livelihoods 	Crop specific small group gatherings in collaboration with CBOs, NGOs to formulate community based initiatives for trials on possible adaptation strategies.	Pilot demonstration projects implemented and promoted for replication. Cross linked to 1.6. Research	1-5 years

**CCA STRATEGIC THRUST 5:
Safeguard Natural Resources and Biodiversity from Climate Change Impacts**

APPENDIX 8

IEC Thrust for Primary Audience
Promote linkages and champions
Influence Policy
Influence practice
Promote Monitoring and Evaluation

Linkages & Policy Target Institutions	Key Message/s (Concept only; not the final wording for delivery)	Delivery Mode/s	Measurable Outcome/s	Timeline
<p>5.1. Water Resource Management</p> <ul style="list-style-type: none"> • Department of Irrigation • Mahaweli Authority of Sri Lanka • Water Resources Board • National Water Supply and Drainage Board (NWS&DB) • Department of Forests • Department of Agriculture • Department of Agrarian Development 	<p>–• Necessity for an Integrated Water Resource Management (IWRM) policy</p>	<p>Through consensus between Ministers in charge of the Target Institutes convene a national forum to deliberate on IWRM and set up an action plan to formulate policy.</p>	<p>A National Integrated Water Resource Management (IWRM) policy formulated and implemented</p>	<p>1-2 years</p>
<p>5.2. Land Degradation</p> <ul style="list-style-type: none"> • Department of Land Commissioner General • Centre for National Physical Planning [CNPP] • Land Use Policy Planning Division, LUPDD • Department of Land Settlement • Provincial Councils • Department of Forests • Department of Wild Life • Department of Agriculture 	<p>–• Necessity to review and coordinate control of land degradation and consequent effects on productivity of agricultural land through proper land use in the face of climate change impact</p>	<p>Through consensus between Ministers in charge of the Target Institutes convene a national forum to evolve a more effective and integrated approach for control of land degradation.</p>	<p>An integrated approach for control of land degradation established.</p> <p>Ground level audience discriminated, listed and messages identified (who to reach? with what?) Message creation to be outsourced to a professional entity.</p> <p>How to Reach to be guided by a Professional Media Profile Survey</p>	<p>Forum convened within 6 months.</p>

Policy Implementation Target Institutions	Key Message/s (Concept only; not the final wording for delivery)	Delivery Mode/s	Measurable Outcome/s	Timeline
5.3. Invasive Alien Species • Biodiversity Secretariat	–• <i>Need for review on control of invasive species based on South and Southeast Asia Recommendations for Minimizing the Spread and Impact of Invasive Alien Species</i> August 2002, Bangkok, Thailand	National forum of stakeholders determined by the Biodiversity Secretariat convened to deliberate on possible implementation mechanisms of the recommendations	A National Implementation Strategy established. Cross linked to 1.6. Research	Forum convened within 3 months
5.4. Forest Conservation • Department of Forestry • Department of Wild Life	–• Need to control the escalating trend of converting forest areas to other uses in order to build resilience against climate change impacts	National forum of stakeholders determined by the Target Institutes convened to deliberate on overcoming barriers to implementation of existing policy.	Obstacles to implement policy identified and strategies to overcome them presented to the Minister in charge. Cross linked to 1.6. Research	Forum convened within 6 months
5.5. Wetland Conservation • National Wetlands Steering Committee, under the Central Environmental Authority.	–• Need to assess climate change implications in the National Wetland Policy and establish implementation mechanisms	National forum of stakeholders convened to deliberate on possible implementation mechanisms of the Policy to meet climate change impacts	A Policy implementation mechanism established. Cross linked to 1.6. Research	Forum convened within 6 months
5.6. Coastal Resources • Coastal Conservation Department	–• Need to re-asses capacity to implement Coastal Zone Management Plan	Department brainstorming to identify issues and present to Minister in charge	Implementation issues addressed at Ministerial level	6 months

IEC Thrust for Secondary Audiences				
Promote linkages and champions				
Influence practice				
5.7. Community Based Action Communities with livelihoods centered around Natural resources exploitation	–• Awareness of cause-effect relationships and the long term impacts on livelihoods due to climate change and the necessity for adaptation.	Community group gatherings in collaboration with CBOs, NGOs to formulate community based initiatives to safeguard natural resources and their sustainable use.	A series of pilot projects formulated and implemented as demonstration projects for replication. Cross linked to 1.6. Research	1-5 years

Estimated Financing Requirements

(LKR Millions)

This provides further details on the estimated financing required for the implementation of the overall National Climate Change Adaptation Strategy (NCCAS), in which IEC components are integrated (shown in yellow highlight).

Areas of Intervention	2011	2012	2013	2014	2015	2016	Totals
Strategic Thrust 1: Mainstream CC Adaptation into National Planning and Dev't.	50	554	669	637	820	820	3,550
A Strengthening national climate-adaptation planning and implementation capacity	5	10	30	20	15	15	95
B Ensure future investments/economic plans are climate resilient	10	25	10	-	-	-	45
C Systematically research climate change-adaptation options and disseminate knowledge	15	297	377	362	360	360	1,771
D Increase financing for climate change adaptation	17	210	205	200	400	400	1,432
E Inform and mobilize stakeholders at multiple levels in support of climate adaptation	3	12	47	55	45	45	207
Strategic Thrust 2: Enable Climate Resilient and Healthy Human Settlements	91	496	2,768	2,434	2,398	2,098	10,285
A Mobilize stakeholders for climate change adaptation of settlements	1	50	20	20	-	-	91
B Improve planning to include climate change considerations	15	150	2,192	2,150	2,150	2,000	8,657
C Ensure adequate quality and quantity of water for settlements	11	140	505	215	215	65	1,151
D Combat climate change-related health concerns in settlements	60	105	20	20	20	20	245
E Increase awareness on vulnerabilities and adaptation of settlements	4	51	31	29	13	13	141
Strategic Thrust 3: Minimize Climate Change Impacts on Food Security	8	183	2,123	1,690	1,755	7,215	12,974
A Ensure ability to meet food production and nutrition demand	-	85	345	335	300	-	1,065
B Ensure adequate water availability for agriculture	2	23	1,703	1,200	1,200	6,000	10,128
C Mitigate food security-related socioeconomic impacts	-	10	10	25	25	1,000	1,070
D Increase awareness and mobilize communities for climate change adaptation	6	65	65	130	230	215	711
Strategic Thrust 4: Improve Climate Resilience of Key Economic Drivers	160	375	3,765	3,610	3,875	3,375	15,160
A Minimize impacts of climate change on infrastructure	125	130	3,025	3,000	3,000	3,000	12,280
B Minimize impacts of climate change on plantation sector	-	25	25	25	300	300	675
C Assist key industries in coping with climate change impacts	-	10	530	510	500	-	1,550
D Raise awareness about climate vulnerability in key economic sectors	35	210	185	75	75	75	655
Strategic Thrust 5: Safeguard Natural Resources and Biodiversity from CC Impacts	20	219	279	1,652	1,770	1,790	5,730
A Ensure adequate quality and quantity of water for human wellbeing and ecosystem services	-	4	4	2	15	10	35
B Enhance climate change resilience of terrestrial ecosystems and their services	-	50	100	1,520	1,520	1,520	4,710
C Enhance the resilience of coastal and marine ecosystems and associated vulnerable species	-	10	35	35	100	100	280
D Enhance climate change resilience of natural inland wetlands and associated species	15	55	50	-	50	50	220
E Address socioeconomic concerns resulting from climate change impacts on biodiversity	-	-	-	25	25	100	150
F Research, monitor and address impacts of climate change on biodiversity	-	50	50	50	50	-	200
G Raise awareness & mobilize stakeholders for conservation of biodiversity and ecosystem svcs.	5	50	40	20	10	10	135
Total	329	1,827	9,604	10,023	10,618	15,298	47,699

Source: NCCAS Discussion draft, v 30 October 2010