

Paper

on

**EDUCATION, TRAINING
&
PUBLIC AWARENESS
on
CLIMATE CHANGE**

by

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Development Alternatives is a non-profit corporate organisation with a mission to sustainable development through appropriate technology, institutional design and environmental management.

Environment Systems Branch focuses on key environmental concerns related to basic needs fulfillment, industrialisation and urbanisation, living resources conservation and global environment. Our activities include research and design, programme formulation, policy influence, education and training and ground level implementation.

1. INTRODUCTION

The countries who are Parties to the UN Framework Convention on Climate Change have accepted certain commitments taking into account their common but differentiated responsibilities and other specific national and regional development priorities. To fulfill these commitments the Parties need to promote and facilitate various education, training and awareness programmes at the national, and, as appropriate, subregional and regional levels, and in accordance with national laws and regulations, and within their respective capacities as required under Article 6 of the UN Framework Convention on Climate Change particularly the following :

At the National Level / Regional Level

- a. The development and implementation of educational and public awareness programmes on climate change and its effects;
- b. Public access to information on climate change and its effects;
- c. Adopting a participatory process for addressing to climate change and its effects. Similar approach should also be adopted in developing adequate responses to climate change and its effects; and
- d. Organising and providing to scientific, technical and managerial personnel on climate change and its effects.

At the International Level

- a. The development and exchange of educational and public awareness material on climate change and its effects;
- b. The development and implementation of education and training programmes, including the strengthening of national institutions and the exchange is secondment of personnel to train experts in the field in particular for **developing countries**.

Education, Training and Public Awareness in developing countries will facilitate capacity building to enable them to participate fully in and to implement effectively their commitments under the Convention, and for their effective participation in the Kyoto Protocol Process. However education, training and awareness generation have to be country driven, addressing the specific needs and conditions of developing countries and reflecting their national sustainable development goals, priorities and strategies.

Capacity building is a continuous, progressive and iterative process, the implementation of which should be based on the priorities of developing countries.

The Marrakesh Accords also very clearly brought out the objective and scope of capacity building in developing countries. Education, training and public awareness have been identified as one of the important components of capacity building in developing countries.

Education, training and public awareness though identified in the Convention as an important component in the process for successful implementation of the Convention, but since COP 1 in Berlin, not much has been done by different COPs and other international organisations to seriously take up the task. Besides the UNFCCC, the UNESCO has also a positive role.

2. DA EXPERIENCES

2.1 Development Alternatives Experiences

DA's sustainable livelihoods approach towards development at grassroots are two fold learning by doing and making learning purposeful. TARAGram located in Orchha, Madhya Pradesh is the nurturing laboratory for the weaker section of the society. TARAGram as an institution provides an in built incentives through integration of education with livelihoods programme. Saharia the most backward Scheduled Tribe of that region. Few years ago women from this group started working in TARAGram. Today they have learnt an art to earn, think and at the same time TARAGram school provides primary education to their children. Several initiatives like saving schemes has made women accessible to bank and better utilisation of money.

The mission of TARAGram is to build the capacity of community members on techniques and institutions that can regenerate the resource base and make it available for utilisation in an efficient, equitable and environmentally sound manner. TARAGram serves as a model to bring together social, environmental and technological knowledge to generate sustainable livelihoods through decentralised production systems. Such livelihoods are needed in large numbers throughout the developing world to improve material standards while maintaining the physical resource base.

TARAGram manufactures products using biomass and other local raw materials. These, at present, include handicraft, paper, building materials and energy; new ones are being added continually. In addition to serving as a demonstration facility for such livelihood technologies, TARAGram provides on-the-job and course-based training on micro-enterprises to those who wish to set up similar plants.

Another initiative of DA towards education and empowerment is TARAhaat.com - the first mother portal designed specifically for rural India is currently being field tested in 10 centres located 50 kilometres around TARAGram. This facility aims to empower the local communities through the latest advances in information technology.

At the Grassroots: "Converting the need for Housing into Demand by strengthening local institutions"

" Empowering people through land and water"

The sustainable livelihoods approach to rural development can take several forms. In the case of the check-dam project, sustainable livelihoods were created through the intensification and extension of agriculture through enhanced water availability/access.

Water scarcity is one of the major contributing factors to poor agricultural yields in the Bundelkhand Region, Madhya Pradesh State, India.

Development Alternatives' (DA) field office in Jhansi began promoting check dams in 1989 as an appropriate intervention to restore the degraded natural resource base in the Bundelkhand region and help the local inhabitants to escape the debt-poverty-migration trap.

"We are uneducated poor people. What can we do about our problems?"

Like her parents before her, Sita has spent her life working as an agricultural labourer. She never attended school and was married before the age of ten. Recalling her girlhood she notes that even then, water was the major livelihood constraint. She says, "I had no dreams for the future... my mother died when I was young and my mother in law used to beat me... what would we think about the future but farming. We had so much water problems." She adds, "We are poor people. What could we do about our problems? Also we are women. We could not work to solve these problems."

Sita notes that her children continue to face the same problems. All of her family works in the fields and all, she says, "face the water crisis." Sita is hopeful though, that her children will have an easier life than she did. She says, "I want the water problem to be solved. Then my children and grandchildren will be happy."

"I worked without the consent of family members."

Villagers like Halda became involved with TARAGram in different ways. Some were approached in village meetings while others heard about the project through friends and family. News spread quickly about DA's presence. One woman said, "people in the village used to say that there are foreigners here." Others heard about DA directly through the field staff. Many of the women said that what drew them to DA was the prospect of learning new things.

"We can take care of our children now."

One of the most tangible benefits of employment at TARAGram, highlighted by all of the women, is the income. Some of the women described their improved financial situations, saying: "Now we do not have a financial crunch -- now there are no worries," "We can take care of our children now."

But the vision behind TARAGram is not only to provide working days. The vision is to provide sustainable livelihoods -- a concept, which encompasses social as well as economic development. The social benefits are sometimes less tangible but they also came out in the sessions with the women.

... the initiatives have set a system so that the work must go on ...for the people, by the people and of the people...

2.2 DA's Proposed State Level Capacity Building On Climate Change : Through Education, Training And Public Awareness

Climate change is an emerging issue and in developing countries, which are more concerned with poverty alleviation, job creation etc., there is very little awareness about this subject. The low level of awareness about climate change among developing countries places an impediment in effective implementation of their common but differentiated commitments to the Convention on Climate Change and the protocol processes particularly the Clean Development Mechanism (CDM). The 7th Conference of the Parties to the United Nations Framework Convention on Climate Change (UNFCCC) in Marrakesh have further strengthened the need for capacity building of the developing countries on climate change and provided a framework.

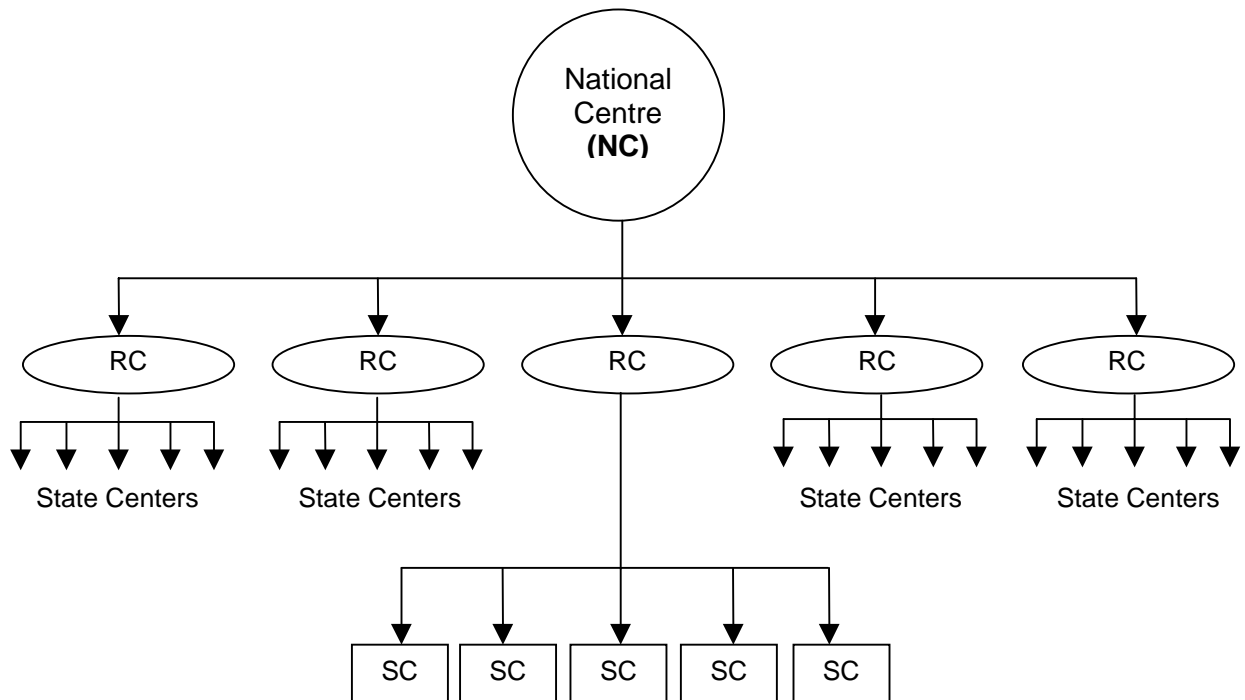
Development Alternatives has been working on global climate change issues for over a decade. To serve the specific requirements of global mechanisms such as AIJ, CDM etc. Development Alternatives conceptualised a Climate Change Centre in 1997. The Climate Change Centre carries out research on climate change including Clean Development Mechanism (CDM) / Activities Implemented Jointly (AIJ) issues, works towards raising awareness on climate change and CDM through organising issue based events, discussions, policy dialogues and contributing articles in newsletters and journals and provides consultancy services to Indian business sector in developing and designing climate change mitigation projects.

Based on its experience over a decade, Development Alternatives proposes to take up the task of building capacity on climate change at the State level in India.

Framework for Capacity Building

- ❑ Capacity-building needs already identified since COP 1 till date must be comprehensively and promptly addressed **to promote sustainable development in developing countries taking into account that economic and social development and poverty eradication are the first and overriding priorities of the developing countries.**
- ❑ Capacity-building activities would be undertaken in an effective, efficient, integrated and programmatic manner, taking into consideration the specific national circumstances of the country and each state.
- ❑ Capacity-building being a continuous, progressive and iterative process, the trickle down framework for local level capacity building is envisaged wherein a National Coordinator would serve as the focal point for coordinating capacity-building activities at the regional and local level, the framework is shown schematically in figure 1.
- ❑ Existing regional and local level institutions in the country have an important role to play in supporting capacity-building activities at local level. Such centres can incorporate traditional skills, knowledge and practices, to provide appropriate services and facilitate information sharing. Capacity-building efforts would, therefore, mobilise these existing regional and local level institutions in the country, and build on existing processes and endogenous capacities.
- ❑ “Learning by doing” being an effective method of capacity building, a few demonstration projects will be used in the process.

Suggested Organisational set up for capacity building on climate change at the State Level : Through Education, Training and Public Awareness



NC : National Centre; RC : Regional Centre; SC : State Centre

Broad Components for Capacity Building

The following is the initial scope of needs and areas for capacity-building in developing countries :

- ❑ General awareness about climate change issues and anthropogenic contributions
- ❑ Awareness about CDM related issues such as mitigation options, transfer of technologies and funds, baseline development, linkages between CDM and sustainable development, emissions reduction etc.
- ❑ Training of officers at the state policy levels to enable them to incorporate climate change concerns in all decision for implementing developmental activities.
- ❑ Helping the local level agencies in preparing greenhouse gas inventories, emission database management, and systems for collecting, managing and utilising activity data and emission factors, useful for preparing National communications
- ❑ Vulnerability and adaptation assessment - adaptation measures
- ❑ Setting up an enabling environment
- ❑ Improved decision-making, including assistance for participation in international negotiations

Strategy for Awareness Generation at Local Level

Development Alternatives proposes to be the national coordinator for capacity building and awareness generation and to set up a National Centre at New Delhi. The National Centre would help in capacity building of five Regional Centres (RC) in the Western, Northern, Eastern, Central and Southern regions. The five Regional Centre would work further for propagation of knowledge and resources at five State Centres (SC) each under the guidance of the NC.

The National Coordinator will ensure that the RCs are well equipped in terms of information and resources. To meet this end meet, the National Centre will facilitate a quality information centre on climate change and encourage establishing libraries in RCs and SCs - including preparing information and awareness national in regional languages in simple term on various aspects of climate change.

The activities need to be planned to meet the objective commensurate with the resources : funds, experts, professionals and appropriate work environment. It is also proposed that the NC to organise training and capacity building workshops at the RCs and SCs.

Functions of National Centres, Regional Centres and State Centres:

Functions of National Centre

Systems Design

- Identification of existing organisations to act as Regional and Local Centres
- Gap identification and need assessment of these organisations
- Developing systems for streamlining the flow information and resources from National Centres to Regional and Local Centres
- Developing systems for frequent monitoring of the activities and outcomes

Nodal Resource Centre

- ***Printed Publications***
 - Preparing several introductory handouts on Climate Change
 - Preparing a Guidebook for designing a CDM project
 - Preparing a Paper on Enabling Environment for Maximising Benefits from CDM
- ***Electronic Products***
 - Preparing Information Flash on Climate Change
 - Preparing user inter-active course materials
 - Preparing documentaries and other awareness generation products
- ***A State of the Art Library on Climate Change***
 - Facilitating the Regional Centre in building up the library
- ***A Query-Response Service on Climate Change & CDM***
 - Launching a Web based Query-Response Service
 - Query Responses to the Stakeholders (Initially for 5 years)
 - Maintaining the Database

Project Development

- Facilitating business sector in project development
- Preparing a database of CDM projects at State and Centre Level
- Serving as an information centre for CDM projects in India (Initially for 5 years)
- Review of projects

Awareness Generation

- Organising awareness generation workshops at regional level
- Organising training courses for Regional Centres at regular intervals

Functions of Regional Centres

Connecting Links with Local Centres

- Identification of existing organisations to act as Local Centres
- Gap identification and need assessment of these organisations, in consultation with National Centres

Regional Resource Centres

- Acquiring resources from the National Centres
- Forwarding the resources to Local Centres
- Developing the resources in local languages, if required

Project Development

- Facilitating business sector in project development
- Preparing a database of CDM projects at State Level
- Review of projects
- Forwarding the database to National Centre

Awareness Generation

- Organising awareness generation workshops at regional level
- Organising training courses for Regional Centres at regular intervals

Functions of Local Centres

Awareness Generation

- Organising awareness generation workshops at regional level
- Organising training courses for Regional Centres at regular intervals

Project Development

- Facilitating business sector in project development
- Review of projects
- Forwarding the database to Regional & National Centre

Outcome of the Capacity Building Efforts

Capacity building is crucial to developing countries, especially those that are particularly vulnerable to the adverse effects of climate change.

Capacity-building would assist developing countries in building, developing, strengthening, enhancing, and improving their capabilities to achieve the objective of the Convention through the implementation of the provisions of the Convention and the preparation for their effective participation in the Kyoto Protocol process that will, in a co-ordinated manner, assist them in promoting sustainable development while meeting the objective of the Convention.

Efforts would be made so that capacity-building activities undertaken within this framework maximize synergies between the Convention and other global environmental agreements, as appropriate.

3. TOOLS : GENERAL

The first and foremost in regard to education, training and public awareness is to develop a process nationally and regionally to prepare material to impart education, training and bring public awareness. This has to be done under a multitier approach. The IPCC and other UN organisations have over the years brought out considerable scientific and response strategy materials both on the science of climate change, its effects and adaptation. Such materials are however only for a very limited number of professionals who are benefited from these literatures and research materials.

Tool I : For Civil Society

Preparation of materials on climate change for the use and consumption of the common man, civil society, community and particularly for students at various levels of school education.

Tool II : For School Curriculum

There is a need to bring out small books on “what is Climate Change”; “how it affects our life - our economic prosperity and our health and other welfare” and “how we all together can save the environment for our benefit and for the benefit of our future generations”. These materials have to be in simple languages that people understand as well as to introduce such an education as a part of school curriculum in primary, middle and at higher levels.

Tool III : Through a Participatory Process

To bring out small books and literature through **a participatory process** with the community that would provide linkages to their day to day life, their life style, and how traditional knowledge of the common people can be integrated to some simple responses to climate change. Such books and literature must be written in the language and vocabulary they would easily understand with illustrations they are familiar with. This is a huge task but must be done with urgency to impress on the people how their actions to-day may not only help their present generation, but also their children, grand children and great-grand children, for a better environment, better air, better soil, vegetation and forests as well as our precious water resources.

Tool IV : For Policy Makers

The next tier of activities under the education, training and public awareness process should be to involve middle level and higher level of policy makers, decision maker, planners at the national and regional level to educate and train such categories of people on climate change so that they would be able to **integrate climate change concerns in all national and regional activities so that all our development activities are sustainable and would finally address to the main agenda of the developing countries : poverty eradication and providing better quality of life to all.**

Tool V : By Organising Workshops and Seminars

District level, national level and regional level workshops, seminars should also be organised at regular intervals for faster dissemination, and exchange of information among various groups and categories of people, communities, civil societies etc. Such a process will accelerate the process of education and training for officials, professionals, teachers in school to update and exchange their so far learned knowledges and experiences.

Tool VI : Taking the help of Communication Media and Village Drama and Street Theatres

Education, training and public awareness must also take the advantage of all communication media like local newspapers, simple fact sheets, television, radio, village dramas, street plays etc.

These are big tasks but must be addressed at all levels with urgency.

Funding

There is a considerable need for external funding to all the developing countries to address to this task of 'Education, Training and Public Awareness'. In addition to the different agencies of the UN, individual rich and benevolent counties must come forward to provide funds under bi-lateral or multi-lateral processes with urgency.

4. MEASURING THE SUCCESS OF THE VARIOUS TOOLS DEVELOPED

Measuring the success of the ETPA Programme in each country must be done systematically by means of several indicators for the society at the :

- Government level
- Business sector level
- Community level
- Local level e.g. school level
- Individual level

Few indicators suggested below may provide the efficacy of the “Six Tools” discussed :

1. Poverty reduction by measuring proportion of population below \$ 1 a day every 5 years;
2. Measuring improvement of general public awareness on climate change as percentage of total population;
3. Measuring increase in awareness on climate change among civil society, policy makers, regulators, industries;
 - 3.1 Climate change introduced in the lower, middle and high school curriculum;
4. Proportion of land area covered by forests and land area protected for biological diversity;
5. Carbon dioxide emissions per capita;
6. GDP per unit of energy use;
7. Prevalence and death rates associated with Malaria;
8. Proportion of population with sustainable access to an improved water source and safe water.

5. CONCLUSION

The model on Education, Training and Public Awareness Climate Change recommended above if implemented and monitored through an agreed monitoring and evaluation framework at the State level, Government level, primary, middle and high schools level, community level, and at the individual level will certainly deliver the desired results.