



# Review of National Adaptation Policies, India

## WT6.1.2



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## 1.0 Introduction

### a. Aims of the Report

This report is aimed at focusing on the issue of Adaptation with reference to Climate Change in Indian National Context. India being a signatory to UNFCCC and also to Kyoto Protocol, has been playing an active role in taking appropriate initiative to support “Adaptation”, as a part of action in the mainframe National Policies; besides, featuring Adaptation in the National Environment Policy in 2006 (23), India has also effectively incorporated the subject of Adaptation in the National Action Plan Climate Change in 2008(13) and in host of cross sectoral National Policies for e.g. Agriculture (16), Water (22), Forest (19), Energy (31), Livelihood Security (29;32), etc. This document presents a synoptic review based on Critical Analysis of National Policies and Action Plan which, have referred to the issue of Adaptation due to Climate Change, as an area of consideration.

### b. Discussion of why Climate Change Adaptation Policies is of relevance in the Deltaic Environment

The Deltaic Environment has already been identified at a global and National Level as one of the most vulnerable areas, vide the Report of the Intergovernmental Panel on Climate Change, 2007(IPCC, 2007) (7). India is well known for its rich Riverine system and possesses one of the Largest Deltas, GBM in the world. The coastal population of India along 7, 500 km of coastline, represents nearly 25% of total Indian population of 1.21 Billion and majority of the coastal people concentrate around the large Delta. Besides the vulnerable Human population living in the Deltas, the National Government of India has made significant investments through Public and Private Funding in the Delta Region in last 65 years after Independence. These investments have largely been made in protecting the coastal areas through shore line afforestation, both Mangrove and Non mangrove depending on the localities, building up embankments, setting early warning system and also rescue shelters and transferring appropriate technologies to ensure food security in the sector of agriculture and fisheries. All these efforts collectively provided a support system for adaptation to climate change. Unless a well-defined Policy and approach strategy is conceived before any Climate Change induced disaster affect the lives and livelihood of the Deltaic people and also cause serious economic loss to the investment, the country will face a major social and economic crisis.

### c. Discussion on why Gender and Migration are important Policy contexts in the Deltaic Environment

In view of the current situation analysis it is observed that nearly 50% of the population in The Indian Deltas are women and largely belong to under privileged rural community. Recent experiences of Climate Change induced Natural calamities in the Indian Bengal Delta (e.g. Cyclone “Aila” in 2009) and Mahanadi Delta (e.g. Super Cyclone in 1999), and others have shown that trend of human migration are largely connected with migration of ‘Able Bodied Males’. The

women members of the emigrant families, along with the children and elders, are left behind in the affected landscape; only when planned migration (as observed in the Migration of 4, 000 people of the submerging Ghoramara Island to Sagar Island in Indian Bengal Delta, between 1994 and 2006, the women members are taken along with the male in the new destination). This process of migration was taken up when sea level rise and tectonic movement led to land subsidence and submergence of the inhabited island; the local department of Panchayat and rural development in association with Sundarbans Affairs Department had decided to allocate land to the people who have lost their both homestead and agricultural land in the affected islands and help them to shift in the nearby larger islands in organised settlements colonies; in the initial phase each family was allocated 6.5 Bigha of land ( 1 Bigha = 1440 sq. ft.) but with passage of time and more demand, the same was reduced to 4.0 Bigha and lastly to 1.5 Bigha; needless to say that the last process of allocation did not suffice the purpose of using the land for house building as well as for agricultural production. In the present scenario, more Climate Change induced Natural Disaster and Calamities are being predicted and as such it is imperative that, special focus should be given for skill development of the women members from the delta region, which will enable them to be employed productively in the demand based occupations in an adaptive manner.

#### **d. Outline of the Report**

The Report has brought out in a chronological manner India's National Environment Policy, 2006 (23) and subsequent actions, focusing the subject of Climate Change. Besides the mainframe policy and Action Plan, all relevant National Policies have been analysed to find out to what extent they effectively address 'Adaptation' and where do the gaps exist? . The report contains a critical analysis of 26 such Policies and including the one Action Plan on Climate Change.

## **2.0 Methodology**

### **a. Country Context**

The Policy Analysis in the present report has been carried out for India, following the DECCMA Policy Review guideline based on literature search from all possible sources and communications with the Nodal Ministry of Environment Forest and Climate Change of Government of India. The Policy analysis also has indicated the current initiative with "BASIC" countries (viz. Brazil, South Africa India and China) an alliance which was formed by an agreement on 28 November 2009; BASIC countries have subsequently met for at least eighteen times till 2014. (Vidal, John, 13 Jan 2010. "China, India, Brazil and South Africa prepare for post-Copenhagen meeting". The Guardian (guardian.co.uk) Most recently, the BASIC countries issued a joint statement asking the rich industrialized nations to scale up both their pre 2020 and post 2020 Carbon emission cut targets (Mohan Vishwa, November 1 2015, Times of India).

### **b. Method applied**

The present document is based on extensive literature search both from Internet and Library search as also through communications selected concern departments/institutions.

An extensive search on the extant National Policies of Govt. of India was made for the period of 1950 to 2015. Since the Climate Change issue has become global agenda item starting from late 1980's, it was observed that, a total of 26 Policy and related documents on Climate Change have been published during 1990-2015, at the National Level; these have been critically analysed for the present study. The documents covered an wide ranging area from the principal subject of Climate Change, to the related sectors ranging from Agriculture, Agro-forestry, Coastal Zone Management, Disaster Management, Energy, Forests, Fisheries, Health, Housing and Habitat, Infrastructure Development, to Public Insurance, Poverty Alleviation, Rehabilitation and Resettlement, Rural Development, Water Resources Management and Women Empowerment.

### **3.0 Data and Analysis**

#### **a. Discussion of Policy Documents**

The policy analysis clearly indicate that besides the nodal Ministry of Environment Forests and Climate Change (MoEFCC), all major ministry of Govt. of India have shown their concern in the respective policy documents on the possible impacts of Climate Change within there are of jurisdiction. As such one can see the Climate Change issue being referred in the Ministry of Water Resource, Health and Family Welfare, Rural Development, Housing and Poverty Alleviation Women and Child Development, Human Resource Development and Power & Energy etc. Apart from the empowered Ministry, national concern at a larger scale could also be evidenced in the document of the Think-Tank – the then Planning Commission now, NITI-Aayog.

#### **b. Content Analysis**

All these documents have been critically analysed from the perspective of 27 sub areas, which can be grouped together under 09 major heads (viz. i. Sustainable Agriculture, ii. Water Resource Management, iii. Health Care Delivery System, iv. Energy used, v. Integrated Coastal Zone Management Planning, vi. Disaster Management System, vii. Insurance Coverage, viii. Women Empowerment and ix. Community Capacity Building for livelihood Development.)

The major Policy which is reflected in the National Action Plan Climate Change of 2008(13) has a total of eight Mission Based Program; three of them on agriculture, water and Himalayan eco-systems are about initiating measures to adapt to the effects of climate change. Subsequently four other National missions on Climate Change have been announced on Wind Energy, Health, Waste to Energy, Coastal Areas, of which one can identify the potential of Climate Change related

Adaptation Action in the Missions dealing with Health and Coastal Areas. It may be emphasized here that other than NAPCC (2008 & 2014), no other Policy documents have clearly indicated any strategy focusing on the theme of Adaptation; however, from the search list in this document (using the key words provided in the protocol), one can find clear but indirect linkage of the activities with the process of Adaptation.

### **c. Key Themes Emerging**

It may be pointed out that, the Government of India, besides being involved in Environment and Climate Change related Adaptation Policy and Actions, have made effort to access “International Adaptation Fund” and has become successful in getting two major projects which are awarded to National Agricultural Bank and Rural Development (NABARD) by Adaptation Fund Board (AFB). These two projects would execute through two CBO’s viz. MS Research Foundation (MSSRF), Chennai (USD 689,264) and Development Research Communication and Service Centre (DRSCSC) (USD 2,510,854) the first one in the coastal region of Andhra Pradesh and second one in the Semi-arid zones of West Bengal in October, 2014 (MoEFGoI, 2014-2015) (12). Jadavpur University, School of Oceanographic Studies is a research partner of the DRSCSC for the second project.

It is to be noted that, Government of India has set up an Adaptation Fund with a corpus of INR 100 Crores (nearly USD \$ 17 million) with the objective of allocation of fund to specially to meet the need and demand based areas like Agriculture, Forestry and Water Resources (MoEFGoI, op.cit, 2014-2015) (12) in the country, first focusing on the Agriculture and Climate Change issues. The Government has also proposed to set up a National Centre for Himalayan Studies in Uttarakhand with an initial outlay of Rs 100 crores, according to the statement of Union Finance Minister Mr. ArunJaitly in July 2014.

It may be noted that, out of the 26 Documents dealing with the National Governance that can related to Climate Change issues. The subject of “Adaptation”, has appeared only in 06 National Policies viz. National Environment Policy, 2006 (23), National Policy for Farmers 2007 (18), National Urban Housing & Habitat Policy, 2007, (24) National Action Plan on Climate Change 2008 (13) and as amended with additional four Missions in 2014 (12), The National Disaster Management Plan (Management of Cyclones) of National Disaster Management Authority 2008 (15), and National Water Policy 2012 (22).

### **d. Gender Analysis**

The Analysis of the 26 National Policy Documents reveals that there is a major emphasis on the role that the women play in Agriculture and the Farm Sector and empowerment of the women with appropriate skill development has been strongly urged upon both in National Agricultural Policy 2000 (16), National Policy for Farmers, 2007 (18) and in National Agro-Forestry Policy, 2014 (20); the legal entitlement of the women on the land holding for farming has also been emphasized. Likewise both in National Health (25) & Nutrition Policy (26), 1993 and National Urban Housing



& Habitat Policy, 2007 (24), special attention has been given for adequate nutritional provision for women and also for specially considering the need for dwelling houses for the Women Headed Household. Further, the National Environment Policy of 2006 (23), which precedes the National Action Plan Climate Change of 2008 (13), has focused on the essential role of women role in the management of natural resources, and stated that *“While they have to bear the burden of natural resources degradation, they have little control over the management of these resources. Relevant provisions of the National Policy for the Empowerment of Women provide a frame work for incorporating elements of proposed actions”*. Document of the Planning Commission on Rural development, 2011 (32), has strongly urged to meet the special requirement of the rural women who often suffer from deprivation. Besides, the Policy on The Poverty Alleviation, 1990 urged for bringing about *“attitudinal changes in society and economic changes in the status of women, including especially advances in female education and the associated increase in participation of women in the labour force”*.

And lastly, in the list of the vulnerable persons identified in the ‘National Rehabilitation & Resettlement Policy’, 2007 (29), women - the widows, unmarried girls and abandoned women, have been identified as a group who need most urgent attention in the affected areas.

#### **4.0 Discussion**

The present review based on key Policy document on Climate Change from India and cross sectoral Policy analysis, reveals that while the National Government has increasingly focused on the current and the future problems that may arise due to impact of Climate Change, and the role of ‘Adaptation’, it has remained almost silent on the issue of “Human Migration”- (which is considered as a part of Adaptation Strategy), Planned or Autonomous, from the areas under stress due to Climate Change.

On the other hand, in India’s National Policy Documents and Action Plans, the major emphasis has been given on the aspects of ‘Mitigation’ and ‘Adaptation’ (both in the original National Action Plan on Climate Change in 2008 and now the amended and extended Action Plan in 2014). Comparing with the wider literature one can come across a host of reference on Climate induced Human Migration and related topics (Brown, Oli, 2008 (3); Frank Laczko and Christine Aghazarm (eds.), 2009 (6); Mc Leman, Robert A. and Hunter, Lori M., 2010 (11); Black Richard, et.al, 2011(2). As such there is a clear gap in the India’s major Action Plan and Policy on Climate Change (which is a part of the Environment Policy, 2006). In summary, four major gap areas can be identified form the Policy Analysis:

- More emphasis has been given both in terms of Policy and Fund Allocation to the Mitigation Program through the missions on Energy Efficiency, Solar Power, and Greening of India etc.



- In the entire Policy document, there is no mention about climate induced Migration from the affected areas to other areas within the countries or outside India (Migration to Middle-East)
- The Gender issue has never been focused in the NAPCC (2008/2014) or in larger context of National Environment Policy (2006).
- Although India has announced NAPCC and the State Level Climate Action Plan for 28 out of 29 states (except for the newly formed State of Telengana), there is no information in the public domain against the plan for the release of fund vis-a-vis budget and time frame.

Wider literature review on Climate Change also reveals increasing concerns on the Gender Equity and Gender Empowerment, both in the policy papers and in proposed actions, in many member countries of UNFCCC (United Nations: Economic and Social Council, 2011) (34). Apart from above mentioned areas of concern, (when compared with other countries, but missing in India's Policy and Action Plan) one may also wonder as to why dedicated budget **has not been allocated** even in 12<sup>th</sup> Five Year plan of India for achieving the 12 goals set up under India's National action Plan; since the entire Action Plan is supposed to be followed and implemented latest by 2017. It would have been much more convincing if budgetary allocation was projected and provided to establish India's credibility. However, in 2015 one can find some budgetary support to achieve India's Solar Mission, India's Mission on Energy Efficiency, India's Water Mission and Greening of India Mission.

It may further be pointed out that, while preparing the National Action Plan on Climate Change which provides the main structural support, there was no evidence of public consultation which is deemed essential in a multi-cultural and multi ethnic society, that exists in the largest democracy of the world-India.

On the other hand it may be noted that, besides focusing on the issues of Adaptation in the National Policies, India has taken up the issue of Adaptation in its negotiation with the "BASIC" countries and along with the other members countries viz. Brazil, South Africa and China, it has affirmed that, 'Intended Nationally Determined Contributions' (INDCs) would include all pillars of the Durban Platform viz. Mitigation, **Adaptation**, finance, technology development and transfer and capacity-building (Joint Statement during 18<sup>th</sup> BASIC Ministerial Meeting on Climate Change, 2014. New Delhi) (8).

## 5.0 Conclusion

The present review based on critical analysis of 26 National Level documents, either directly concerned with Climate Change or logically comes under cross sectoral purview, as attempted to provide an updated version of India's Climate Change Policy, especially focusing on the issue of Adaptation. It is evidenced that, cutting across the main frame and cross sectoral Policy and Plan documents, the need for Adaptation to Climate Change to ensure sustenance of lives and livelihood has been sharply focused by India, a member country of UNFCCC. However, one should also note

that India has spent almost equal attention to the issue of Mitigation through its series of Action Plans on Climate Change, announced between 2008 and 2014.

However, the review also reveals that, India is yet to focus more sharply on the issue of Climate induced “Human Migration”, both ‘Planned’ and ‘Autonomous’; such a process demands plan for prior **Skill Development** of the people specially in the most vulnerable Delta region (as they are conversant only with farming and fishing), so as to make them additional Human Resource where such skill are in demand but in short supply. Without such a process of empowerment both for women and men, ethnic conflicts between the immigrants and native population are likely to arise in the receiving areas.

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## Annexure

**Table 2.1: Count of basic terms in National Policy/Plan Documents**

<b>Policy Documents</b>	NAPCC, 2008	NDM, 2009	Management of Cyclones NDMA, 2008	Crisis Management Plan (Drought) National, 2014	National Agricultural Policy, 2000	National Seeds Policy, 2002	National Policy for Farmers, 2007	Marine Fishing Policy 2004	National Forest Policy, 1988	National Agro forestry Policy, 2014	Management of Floods, 2008	National Water Policy, 2012	Coastal Regulation Zone Notification, 2011
<b>Key Issues</b>													
Adapt	9	-	1	-	-	-	2	-	-	-	-	1	-

**Table 2.1: Count of basic terms in National Policy/Plan Documents (cont.)**

<b>Policy Documents</b>	National Environment Policy, 2006	National Urban Housing and Habitat Policy, 2007	National Health Policy, 2002	National Nutrition Policy, 1993	National Vaccine Policy, 2011	National Rural Electrification Policy, 2006	Planning Commission 2011	National Rehabilitation and Resettlement Policy, 2007	Policies for Poverty Alleviation 1990	Report of the Working Group on W. A. E: XII Five Year Plan.	National Policy for The Empowerment Of Women, 2001	Towards Transparency and Good Governance, MoEF, 2015
<b>Key Issues</b>												
Adapt	4	1	-	-	-	-	-	-	-	-	-	-

## Annexure

**Table 3: Adaptation policy options promoted by National Policy/Plan Documents**

Summary of Adaptation Policy Option	NAPCC, 2008	NDM, 2009	Management of Cyclones NDMA, 2008	Crisis Management Plan (Drought) National, 2014	National Agricultural Policy, 2000	National Seeds Policy, 2002	National Policy for Farmers, 2007	Marine Fishing Policy 2004	National Forest Policy, 1988	National Agro Forestry Policy, 2014	Management of Floods, 2008	National Water Policy, 2012	Coastal Regulation Zoning Notification, 2011
S H G - WomenEmp. & Micro-Insurance for Female Entrepreneurs	-	-	-	-	X	-	X	-	-	X	-	-	-

**Table 3: Adaptation policy options promoted by National Policy/Plan Documents (cont.)**

Summary of Adaptation Policy Option	N E P, 2006	N U H & H P, 2007	National Health Policy, 1993	National Nutrition Policy, 1993	National Vaccine Policy, 2011	National Rural Electrification Policy, 2006	Planning Commission, R. D., 2011	National Rehabilitation and Resettlement Policy, 2007	Policies for Poverty Alleviation, 1990	Report of the W G on W A and E: XII Five Year Plan	N P for The Empowerment Of Women	The Minimum Wage Act
S H G - WomenEmp. & Micro-Insurance for Female Entrepreneurs	-	X	X	X	-	-	X	X	X	-	-	X