







# **Odisha State Action Plan on Climate Change**

(A Review with Special focus on women and children)

#### **Background**

Climate change is now a global phenomenon and its impact on livelihood, health and wellbeing and overall quality of life is not deniable. No country is free from the impacts of climate change, but poor people of developing countries are being disproportionately affected by these impacts. The increasing changes of the climate intensify the problems in human security that developing countries like India have been facing. Odisha is highly prone to multiple hazards exacerbated by climate change – mainly cyclones, droughts and floods. Disasters devastate millions of lives and livelihoods in Odisha each year. More children and women suffer from the effects of these disasters and this is predicted to worsen as storms, floods and droughts become more severe and more frequent because of climate change. Lack of medical facilities, malnutrition, disrupted supply of clean drinking water and lack of proper sanitation facilities make the lives of women and children increasingly vulnerable.

There is emphasis on integration of climate action strategies in existing schemes and policies both at national and sub-national levels. The priority has been to build a resilient and low emissions society. The Government of India's National Action Plan on Climate Change (NAPCC), 2008 was a comprehensive strategy for dealing with the inevitable impact of climate change, which required adaptation measures in several critical areas as well as mitigation of emissions of Green House Gases (GHGs). The Union Government has also set up 12 missions to respond to climate change through different mitigation and adaptation measures. Odisha is one of the states to formulate a comprehensive Orissa Climate Change Action Plan (2010-2015) followed by Odisha State Climate Change Action Plan (2015-2020).

#### Rationale

The Odisha State Climate Change Action Plan (hereafter SAPCC) is a welcome step towards identifying vulnerability and an agenda for taking suitable adaptation and mitigation measures. Now a lot needs to be to implement it.

There is an urgent need to make women's and children's vulnerability to climate risk more visible and build the capacity of mandated institutions and departments to take up planned policy and appropriate corrective measures.

# **Objectives**

- To analyse the vulnerability of Children and Women in Odisha in the context of climate change.
- To review the status of implementation of Odisha SAPCC (2010-2015) with regard to planning vs. realization, implementation strategies, addressing vulnerabilities of women and children and the monitoring and evaluation (M&E) framework.









- To review Odisha SAPCC (2015-2020) to know the extent to which the key priorities are addressing the vulnerabilities, appropriateness of the action plans aligned with key priorities, scope for collaboration / convergence, and the M&E mechanism.
- To review budget process, allocation and expenditure pattern for SAPCC 2010-2015 and 2015-2020.
- To review some of the key flagship programmes like Swachh Bharat Abhiyan (SBA), Sarva Shiksha Abhiyan (SSA), Integrated Child Development Scheme (ICDS) and National Health Mission (NHM) in the context of SAPCC commitments.
- To recommend suitable corrective measures both at the policy and practice level to take climate change agenda forward.

#### Methodology

This is a qualitative study based on secondary review of literature. Some of the important documents including National Action Plan on Climate Change (NAPCC), 2008; Orissa Climate Change Action Plan (2010-2015); Progress Report on Odisha Climate Change Action Plan (2015); Sustainable Development Goals (2015); Odisha Climate Change Action Plan (2015-2020); and Odisha State Disaster Management Plan (2016) were studied. Four major flagship programmes / schemes like SBA, SSA, ICDS and NHM were analysed in the perspective of climate change with focus on vulnerabilities of children and women. Further, bilateral discussions with the officials of concerned Departments including Forest and Environment, Revenue & Disaster Management, Women & Child Development, School & Mass Education, Agriculture & Farmers Empowerment, Panchayati Raj, Health & Family Welfare and OSDMA were held to capture required information relating to budget allocation, convergence and monitoring the process of implementation of SAPCC at different levels

## **Scope and Limitations**

Efforts have been made to clearly articulate the vulnerability of children and women to climate change and their needs referring to the secondary literature, bilateral discussions with the officials of concerned departments and views / inputs of different stakeholders including thematic experts, development practitioners, and academia through organizing multi-stakeholder consultations. Accordingly, the need for capacity building of mandated institutions and departments towards mainstreaming resilience in development planning and effective practical action at the appropriate level have been derived.

However, the process of review of the SAPCCs is confined to the following aspects only.

- Analysis and review of secondary sources of information relating to climate change.
- Review of the Odisha SAPCCs (2010-15 & 2015-20) with special focus on vulnerability of children and women to climate change.









• Only four flagship programmes / schemes such as: SBA, SSA, ICDS and NHM have been analysed in the perspective of climate change with focus on vulnerabilities of children and women.

### Vulnerability of Women and Children in Odisha

One of the most urgent issues of our time, climate change is already impacting populations and ecosystems around the globe, threatening to set back development efforts by decades. But the impacts are not being felt equally. Women and children are among the most vulnerable populations in the world, suffering the most from illness, poverty and disparity. Despite important roles within their communities, too many women and children lack access to quality health care, compounding many other threats to their ongoing health and well-being. The vulnerability of women can be assessed from the following facts.

- Poor representation in household and community level decision making processes.
- Poor access to information, skills, resources, and finance.
- Suffering from discriminatory division of labour often overworked and low paid.
- Many a time, the loss of sources of income (such as livestock, kitchen gardens usually controlled by women) erodes their economic status.
- The collapse of physical space (shelters) and subsequent social dislocation further increases their vulnerability towards sexual exploitation.
- Poor political participation, gender insensitivity, discriminatory governance systems, skewed
  economic entitlements of women result in women being the worst sufferers in disaster
  situations.

(Source: Voicing Silence- Experience of Women with Disasters in Orissa, OSDMA, 2002)

Protection, especially for children, becomes a more severe problem in times following disasters as parents are pre-occupied with how to re-establish income and food sources for the household, resulting in many children being left unattended. Traffickers take advantage of the situation offering promises of work when poor families are in need of income. Unattended children in these communities can be at heightened risk of disrupted school attendance and increased vulnerability to trafficking. Boys tend to be at a higher risk of being sold into child or bonded labours as it is fairly common between the ages 12 -16 to migrate for work in construction, hotel and or textile factories. Girls on the other hand are at a higher risk of sexual exploitation

### SAPCC addressing Women and Children Vulnerabilities: Key Observations

• Construction of farm ponds and post-harvest management training has helped women farmers to enhance their economic empowerment through vegetable cultivation and value









addition of food grains. Cultivation and consumption of vegetables also meet the nutritional deficiency of children and women especially in the tribal pockets.

- During the cyclone and flood situations, the women and children are comparatively more vulnerable. Construction of multipurpose cyclone shelters along the coastal belts has created great opportunity for the safety and security of women and children during a cyclone.
- Activities of community preparedness for disaster management would create awareness among women on precautionary measures that need to be taken up in order to make them and their children safe during disasters.
- Activities undertaken for promoting biogas and biomass fuel consumption under the renewable energy policy would be helpful to women and children by enhancing their standard of living through building a pollution free environment.
- Energy efficiency measures in supplying water would enable longer periods of water supply, which will ultimately be helpful for the women to maintain proper sanitation in the families.
- Early warning disease surveillance activities to control vector borne diseases will be very helpful to poor women in the villages to keep their poultry safe from bird flu, which would ultimately enhance economic empowerment of poor women.
- Activities undertaken for reforestation will have great impact on income generation status of women especially in the tribal pockets. Through collection and selling of NTFPs, the economic status of women can be enhanced.
- Plantations to cover bald hills would have significant impact to absorb carbon emissions and maintain a more equitable temperature in the micro-environment, which will ultimately be helpful to keep children safe from sunstroke and extreme heat.
- Children are susceptible to diseases like hepatitis, diarrhoea, typhoid, dysentery and jaundice. Development of specific plans under the health sector is a good way to protect the children from these diseases.
- Setting up separate heat stroke room with AC facility in PHCs would be an important step to address children's vulnerability to heat strokes.
- A road map to monitor environmental pollution in the mining areas has been developed by the state pollution control board which will be very helpful to reduce pollution in these areas and thereby to keep children and women safe from various kinds of diseases.
- Development of plan for installing water meter by the urban sector will be very helpful to check water waste at the household level. This initiative will have enormous impact in helping women to fulfil their water needs.
- Solid waste management and lighting roads through energy efficiency technologies have been of great help to women and children in the cities where these activities have been carried out.
- The river health monitoring study undertaken by the state pollution control board is a significant step to combat water borne diseases that affect women and children the most. As the study explores the water quality of rivers, the findings will be of great help to control water contamination and other related issues in the rivers.









### **Budget Allocation and Expenditure Pattern in SAPCC: Key Observations**

- The departments / sectors have only linked existing activities to climate actions and reported the same in the plan. The nodal agency / department (Forest and Environment department) does not have any control over the budgetary allocation or spending by administrative departments. It only collects the information provided by the department and report the progress.
- The activities reported in the SAPCC are not aligned with the state budget documents. On the other hand, there are a few activities reported in the budget documents but not reflected in the SAPCC. This makes it difficult to monitor the budget for climate actions.
- While looking at budget for different activities within the sectors it was found that emphasis has not been given to those activities which should get priority in resource allocation. For example, within energy sector "Reduce transmission and distribution losses" has got high priority in resource allocation but there is no clear activity plan and higher resource allocation for renewable energy / clean energy interventions.
- Departments like industry, steel and mines and transport have very little provision for climate actions, although they are the major contributors to climate change.
- A separate budget statement as per government accounting structure needs to be prepared by the nodal agency for stringent monitoring. The statement may report in two parts like expenditure by state budget and expenditure by other sources.

#### Recommendations

- Odisha does not have any Policy on Climate Change. It needs a comprehensive Policy with a clear vision and mission based on which the SAPCC should be developed.
- The present form of climate change planning in Odisha does not follow the bottom-up approach. All plans are being prepared at the state level by taking opinions of thematic experts and departmental functionaries. The Gram Panchayat (GP) the lowest tier of the governance system has no role in the planning and execution of SAPCC. The SAPCC has little space for the GP, reduces its effectiveness and holds very little hope to bring desired changes. To make the state's climate change action plan effective, a bottom-up approach should be followed, including the Gram Panchayat Development Plan (GPDP), block and district while framing the SAPCC.
- Climate change impacts are now found in every sector in the country. Each department of the government, has a possibility to address the climate vulnerability of the country and the states. The climate change action plan for Odisha covers only 11 to 12 departments. Some key departments (e.g. Women & Child Development, School & Mass Education, ST & SC Development, Panchayati Raj and Drinking Water) have been left out while framing the SAPCC. Convergence among all departments is necessary to make the SAPCC more inclusive and result oriented.









- Women and children are comparatively more vulnerable to climate change effects. However, the SAPCC places no emphasis on addressing the special vulnerabilities of women and children. This should be taken care of during implementation of the 2015-2020 SAPCC.
- Climate change affects sanitation by making water supply less certain. After 70 years of Independence, more than 85.9 percent of rural households don't have latrines, forcing residents to defecate outside. While framing the SAPCC document, this aspect seems to have been under emphasized. This lacuna should be addressed during implementation.
- Some of the activities planned under the SAPCC, but not all of them do. All activities should have numerical targets to make M&E easier.
- The SAPCC is on a five-year time scale, without segregated annual plans and targets. This may affect timely implementation. Annual plans and targets may be fixed for effective monitoring.
- While preparing the action plan, the opinions of subject specialists are given importance. But, there is no formal platform to consult citizens who may have rich experiences on climate change factors as well as their impacts. Formal platforms for citizens' consultation on climate change should be set up at various levels in the state.
- Government initiatives and actions may not be sufficient to implement the SAPCC. But in most sectors, the SAPCC gives little emphasis to the public-private-partnership (PPP) mode of intervention. The PPP mode should be explored more carefully and implemented wherever possible. Actions to combat climate change are vitally dependent on active public support.
- The sectors identified in the SAPCC to fight climate change are inadequate. Many other factors related to socio-economic and cultural aspects of human being also significantly affect the climatic conditions of the state. These aspects should be taken into consideration.
- The Climate Change Action Plan Cell (CCAPC) comprising of only three members may be expanded by involving more experts from different fields to make the CCAPC more effective and competent in the development, monitoring and evaluation of SAPCC provisions and coordinating with all other agencies.
- Similar to the CCAPC at the state level, climate action plan cells should be set up at district and block levels to ensure proper implementation, monitoring and evaluation of the SAPCC provisions in their respective jurisdictions.
- In order to make people aware of climate change vulnerabilities, publication of knowledge products may be taken up by the CCAPC, with a focus on women and children. To enable women and children make their contribution to restrict climate change impacts, teachers, schoolchildren and women farmers need to be made more aware of climate change issues.
- During disasters, schools and AWC buildings are either affected or used as shelters. Either way, teaching and nutritional programmes for children are badly disturbed. School and AWC buildings should be made far more disaster resilient with green energy provisions, toilets, water supply, labour room and kitchen shed.
- As per 2011 census 32 percent of the total working population is female of which 71 percent women are engaged in the agriculture sector. Out of the total number of women engaged in









the agriculture sector, 83 percent are working as agricultural labour. With climate change impacts, these women often lose their income source. Climate resilient cropping patterns and women friendly agricultural techniques should be adopted, as per the provisions of State Agriculture Policy, 2013.

- Promoting organic farming has not been a priority agenda in any of the sectors under SAPCC. The present practice of farming relies heavily on use of chemical fertilizers and pesticides which is the major cause of reducing soil health and spreading of fatal diseases. Therefore, organic farming through traditional approach should be prioritized.
- There are many flagship programmes that are designed to promote infrastructure facilities and improve the behavioural practices of women and children. These also help reduce their vulnerability to climate change impacts. However, the SAPCC does not reflect on any of these flagship programmes like ICDS, NHM, SSA, SBA, MGNREGA etc. These programmes and their departments should be in the SAPCC framework.
- The SAPCC document appears to show a wide gap between detailing out action plans and their respective budgetary allocations. Due to this gap, it is tedious to monitor the SAPCC budget. While framing the SAPCC document, each action should be linked with a budget allocation and its source, mentioning the departmental budget head.
- With regard to the budgetary planning for climate change actions, it appears that in spite of significant importance, seven sectors in the 2015-20 SAPCC have negative growth of budgetary allocation from the 2010-15 action plan (e.g. Coast & Disaster, Energy, Forest & Environment, Health & Family Welfare, Housing & Urban Development, Industry, Steel & Mines). On the other hand, some sectors have unexpected growth of budgetary allocation in 2015-20 (e.g. Transport and Water Resource) as compared to the previous SAPCC. A more rational approach to budget allocation will be helpful.
- Over the periods, budget allocation for climate change actions in Odisha is rising. In the first SAPCC, the budgetary target was Rs 17,049 Crore, which has increased to Rs 31,663.58 Crore in the second SAPCC. However, key sectors / departments like Industry, Steel & Mines and Transport have not been allocated sufficient budget in either plan period. At the same time, despite good allocation and expenditure in SAPCC 2010-2015, a few sectors have underestimated the budgetary target for the period 2015-20.
- A separate budget statement as per government accounting structure needs to be prepared by the nodal agency for stringent monitoring. The statement may report in two parts like expenditure by state budget and expenditure by other sources.
- There needs to be a robust mechanism to review the implementation of the SAPCC. At the intra-department level, the review may be conducted on quarterly basis under the chairpersonship of the Chief Secretary. In addition, review may also be taken up at the ministerial level on half-yearly basis under the chairpersonship of the Chief Minister.

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