

## INPUT PAPER

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### **INSTITUTIONALISING CLIMATE SMART DISASTER RISK MANAGEMENT APPROACH**

At national, state and local level

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## 1. Introduction

Countries need a '**Climate-Smart**' revolution. Major changes are needed in the different sectors around the world if future generations are to survive and grow. Significant climate changes are taking place worldwide due to global warming and different states of India are severely affected by the same. Agrarian communities living in coastal, tropical and sub tropical regions are now dealing with extreme weather conditions: the dry lands are further drying up while the flood prone areas are over-flooded; leading to undeniable impact on agriculture. In addition, change in the time and amount of rain during the cropping season has badly hit agriculture; making it an unviable livelihood option. As a result, livelihoods and food security is threatened in parts of India and youth is forced to migrate to urban areas as labourers.

The adverse effects of climate change are the severity and frequency of the disasters causing major losses both to economy and people. The impacts of climate change on disasters are "profound, complex and somewhat uncertain" (Mitchell and Ibrahim, 2009). On one hand, climate hazards do not always cause disasters; it is a combination of an exposed, vulnerable and ill-prepared system (country, community or household) with hazard event that results into a disaster (IPCC, 2007). However on the other side, climate change is increasing the disaster risk as the frequency and intensity of hazards is increasing, therefore coping, response mechanisms and economic planning for disasters based on past vulnerabilities may not be enough. In addition, the average climate conditions and variability have been changing in the past few years due to climate change, which has generated new threats that communities have no experience of handling in the past; thus increasing the risk and vulnerabilities. Scientists are increasingly able to predict the impacts on the communities if the earth continues to warm up. However, it is impossible to forecast with certainty of what the future impacts will be. It is critical therefore, to mitigate the vulnerability of communities and ensure their increased capacities for resilience to disaster risk. The consequence of a catastrophe contributes in a large degree, abetting an accelerating a downward spiral of deprivation in those communities who are worst affected.

Climate change and disaster management communities have operated largely in isolation from each other. This situation must change as a matter of urgency. Both climate change adaptation and disaster risk reduction share an objective of development and effective planning for the management of uncertainties and poverty alleviation which will help in rural development and capacity building. Therefore, mainstreaming adaptation to climate change and disaster risk reduction within development at community level is essential. This can be done using the **Climate Smart Disaster Risk Management (CSDRM) approach**. Conceptually the approach is easy to digest, but challenging at implementation level. The unique three pillar approach provides CSOs with means to identify the processes that are needed to build disaster resilient and climate smart communities. The approach helps to evaluate the existing tools and frameworks from disaster risk management, climate change adaptation and development that are right for particular programmes or projects. Moreover, it helps to build partnerships and evaluate progress through concrete indicators that can help implementation of policies that are disaster resilient.

## 2. Climate Smart Disaster Risk Management (CSDRM) Approach



Figure 1: CSDRM approach links DRR, CCA and Development

Source: Changing Climate, Changing Disasters: Pathways towards Integration, 2012

<sup>1</sup>CSDRM is a process-oriented approach; it provides guidance to stakeholders to systematically address climate change, disaster risk reduction and development not only at policy level, but also at the implementation level. It is designed for those who are responsible for managing disaster risks at national, state and local and organisational level; they can identify one or many entry points and eventually find a way to integrate their focus area and climate resilience. The guide draws out different routes through three central pillars that are divided into 12 action points (see figure 2).

The three main silos are:

- i) Tackle Disaster Risks and Uncertainties
- ii) Enhance Adaptive Capacity
- iii) Address Poverty, Vulnerability and Their Structural Causes.

The guide recommended the following process for applying climate smart disaster risk management (CSDRM) approach from the global SCR publication '*Changing Climate, Changing Disasters, Pathways to Integration*' that SWAD used.

Table 1: Recommended steps for applying the CSDRM approach (Source: *Changing Climate, Changing Disasters: Pathways towards Integration*, 2012)

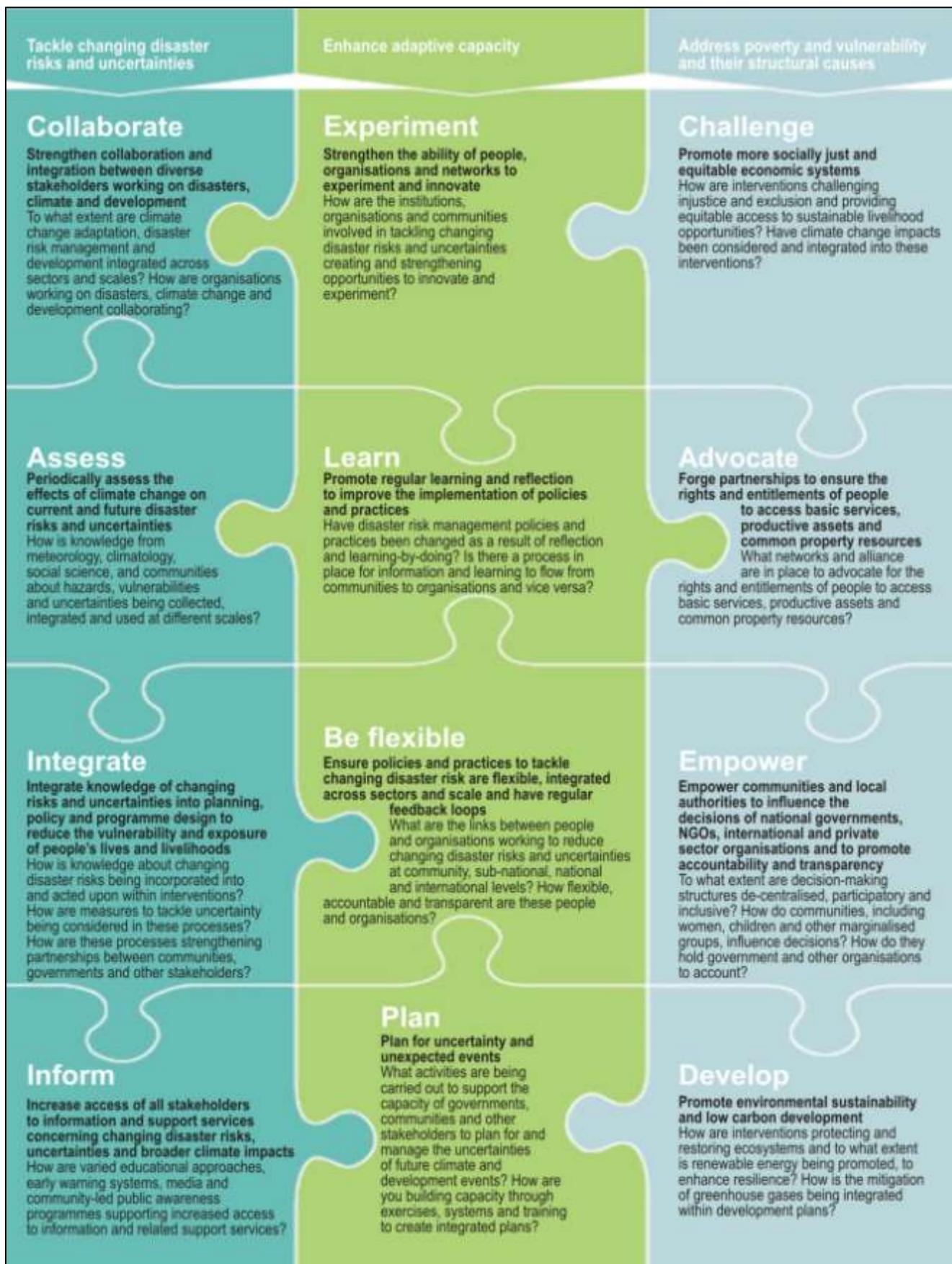
<b>Step 1&amp;2: Where are we now?</b>	This stage is taken before we start implementing the approach at community level. It involves using action points and guiding questions to assess and reflect on your organisation's capacities. Indicators are then used to review existing programmes or policies to plan new ones
<b>Step 3&amp;4: 'Where do we want to be?' and 'What do we</b>	This stage involves identifying potential entry points for the community based organisation to apply the CSDRM approach and map out integration pathways, develop action points and

<sup>1</sup> The Climate Smart Disaster Risk Management (CSDRM) approach has been developed and co-created by more than five hundred practitioners, policymakers, scientists and academics from climate change, disasters and development communities in ten 'at-risk' countries across Africa and Asia (Bangladesh, India, Nepal, Sri Lanka, Kenya, Tanzania, Sudan, Cambodia, Indonesia and the Philippines), led by Institute of Development Studies (IDS), UK. CSDRM is an *'integrated social development and disaster risk management approach that aims simultaneously to tackle changing disaster risks, enhance adaptive capacity, address poverty, exposure, vulnerability and their structural causes and promote environmentally sustainable development in a changing climate'*<sup>4</sup>.

<b>need to do differently?'</b>	to select indicators to measure progress.
<b>Step 5:</b> <b>The CSDRM Journey – ‘Are we moving towards integration?’</b>	This stage involves monitoring and reviewing the progress and understanding the internal and external factors that enable or constrain integration efforts. Doing so helps to identify new opportunities and /or corrective actions.
<b>Step 6:</b> <b>Looking back – ‘What has changed, why and how?’</b>	This is an important focus of the approach and involves looking at the progress made, evaluating it and reflecting on what has worked or not, and what changes can be made in the future.

Further, it provides indicators with each of the action points that can help to assess and reflect the organisation's work and operational environment in relation to CSDRM. They help you to identify strengths and weaknesses in relation to 12 action points. It can be used to evaluate the effectiveness of existing initiatives as a part of monitoring and evaluation process. The CSDRM approach not only facilitates the process of analysing whether existing programs and initiatives are climate smart or not, it also follows identification of pathways for integration that can help institutions in ensuring greater resilience of their planned interventions.

Figure 2: 12 CSDRM action points and questions that will aid in organisational self assessment  
 (Source: Changing Climate, Changing Disasters: Pathways towards Integration, 2012)



### **3. Society for Women Action Development (SWAD)**

SWAD is a women headed organisation that emerged from the disaster response and development activities initiated by a local group of women. Given the socio-economic condition of Odisha, SWAD intervened in the upliftment of the marginalised and poor communities. The thematic areas of intervention involve women empowerment, disaster risk reduction linked to sustainable livelihood and development, income generation and micro-credit support, water sanitation programme amongst others. The intervention of SWAD resulted in tangible achievements like 4000 rural women involved in the process of development through Self Help Groups (SHGs) network, federate bodies and cooperative; communities involved in 76 villages for disaster preparedness and response initiative; school students and communities of 50 villages have taken initiative locally, 1000 women engaged in production and remunerative marketing through micro credit support. Water sanitation programme conducted in 60 villages to benefit 20,000 people.

The CSDRM approach can be applied similarly to any institution at government or nongovernmental organisation, in any program or campaign from local to regional levels.

#### **a) Why CSDRM for Civil Society Organisation?**

Communities are increasingly affected by natural disasters. Losses are not only in terms of lives and economy, but post disasters, the livelihoods and health are badly hit. The ostensible causes of such conditions are due to lack of preparedness and planning due to physical, environmental, economic and social and political issues.

Political and public awareness will always help in the post disaster relief and response. Sometimes, medium and small scale disasters are also as devastating as large disasters for local community to recover. The impacts of disasters will accumulate and result major losses. Therefore, preparedness is essential. At local level, the system should be strengthened as they help to integrate climate information and advice on the adaptive measures into local contexts. This can be fostered by development of skills and capacity at local level, including training of trainers to interpret risk information; and by sharing new techniques such as disaster resistant crop varieties, climate forecast and early warning systems can improve adaptation to climate change and thus make them less vulnerable.

CSDRM approach builds upon what has already been done and enhances their ability to address these challenges. It tries to re-use the concepts and techniques that government and other working bodies are already familiar with such as empowerment of local community. The approach can improve the present ways of working and includes 'climate-smart' in each of its future activities. In addition, continuous knowledge sharing with the community members helps them to know how the changing climate is going to have an impact on disasters and how can they reduce the impacts of these changes in their lives.

### **4. Institutionalising Climate Smart Disaster Risk Management Approach**

SWAD developed interest in the CSDRM approach by attending the workshops organized by the project partners with support of CDKN in Bhubaneswar in March' 2013 and May' 2013

on Self Assessment through CSDRM approach and Monitoring and Evaluation respectively. SWAD was actively involved in the implementation of governmental policies and bringing change at grass root level. Their outreach and relation with the community members made it easier to institutionalise CSDRM approach at local level.

With the help of the SCR guide, *Changing Climate, Changing Disasters: Pathways towards Integration* and AIDMI's technical support, and financial support of Climate development and Knowledge (CDKN) SWAD began the implementation of CSDRM approach. The following is **process** of integration of CSDRM approach at institutional level:

### **a) Self assessment at institutional level:**

The self assessment process is about taking the pulse of an organization – what is or isn't currently working well and what is hindering the progress? The process was to identify the current work and link with climate smart actions. The step-by-step at programme and institutional level also helped to identify the current and future possible collaboration for being climate smart and capacity requirement of SWAD.

SWAD has been involved in need based intervention to address the emerging issues and problems in which primary stakeholders are the prime actors. Since inception in 1989; the major themes of SWAD are as following:

1. Women Empowerment
2. Strengthening Community Governance Systems
3. Reducing Disaster Risk
4. Climate Change Adaptation
5. Disaster Response and Mitigation
6. Awareness Campaign

This first step was to assess how '**climate smart**' their existing disaster risk management projects and programs. Implementing CSDRM in practice was structured around the policy and programme management cycle. It involves using action points and guiding questions to assess and reflect on SWAD's capacities. Indicators are then used to review existing programmes of SWAD.

The approach required systematic investment of people skills, partnerships with community members and flexibility to adapt to technical innovation. A favourable environment was created for the implementation of CSDRM approach so that information sharing and decision making can be transparent and favourable. The self-assessment was done with above-mentioned thematic areas of SWAD. A discussion with the team members of SWAD was conducted to build understanding on CSDRM approach within SWAD level for effective and realistic assessment and integration. This helped SWAD to think through and identify root causes before finding a solution. Therefore, it was important to involve all stakeholders in the projects and activities so that organisations truly become 'climate smart'. CSDRM approach would not only enrich project planning and strategic steps but build long term adaptive capacity of people to evolve their own solutions.

### **b) Setting Indicators:**

This step involves identifying potential entry points to apply the CSDRM approach with SWAD, map out integration pathways (AIDMI, 2013b), develop action plans and to select indicators to measure progress.

SWAD team decided to choose strength as one of their entry point as they believe that they would be able to build on the activities better. SWAD has experience and expertise in spreading awareness and information about the disaster risks, response and recovery uncertainties, government policies and climate change impacts. They have conducted many trainings for spreading awareness, sharing information, knowledge building. Disaster risk information is made available in the assessment of potential risks and for planning at community level. Thus, the entry point chosen by SWAD is 'Inform'.

**Table 3: The guiding questions and indicators are explained below:**

Action Points	Guiding Question:	Indicators:
<b><u>Inform</u></b>	How can varied educational approaches, early warning systems, media and community led awareness programmes promote enhanced access to information about support services and rights?	<ul style="list-style-type: none"> <li>• Climate information is made relevant to the needs of community and is communicated across the communities and public services no matter how remote</li> <li>• Communication strategies take into account perspectives of community members including marginalised groups regarding the risks and uncertainties</li> <li>• Community members have ready access to relevant climate information through formal and informal mechanisms and can apply the learning to reduce uncertainty and enhance their livelihoods.</li> </ul>

### **c) Integration Pathways:**

The guiding questions and indicators are developed. The suggested integration pathway for 'Inform' should read: 'Assess', 'Plan', and 'Empower'. Each pathway links the action points within the 3 CSDRM silos and as the actions are interrelated, they need to be taken together.

### **d) The CSDRM Journey – Are we moving towards integration:**

This step was involved with monitoring and reviewing the progress and understanding the internal and external factors that enable or constrain integration efforts. A monitoring and evaluation framework was designed based on CSDRM approach where SWAD team can check and measure the progress and also looking back for what has changed and how. The efficiency of these interventions varied in terms of the ability of different communities and

economies to address the climate change risk. Therefore, it became imperative to monitor and evaluate so that its efficiency, effectiveness and sustainability is guaranteed.

### e) Challenges and Results

There were a few challenges and limitations that were faced however the commitment of stakeholders helped to overcome from these challenges.

Since SWAD is a project based organization its resources are limited and so are the time frames for the project. The team members are divided into small teams who work on specific projects. In addition, skills and knowledge of members are limited on CSDRM approach as it is implemented at local level for the first time. The team took these challenges as opportunities to learn and grow. Participatory tools were used by partners for assessment and integration. The team decided to come up with short and long term plan of actions in the line of ongoing campaign and activities.

The case can be further developed through retesting with another institution (at national or state level) that focuses on the theme of development and/or climate change. This will allow good analytical case of institutionalizing CSDRM in and between DRR, CCA and development agencies. The case could be further developed through support of pilot.

The commitment and support of involved agencies **resulted** into initiation of concrete integration of climate smart component in existing programmes including **school safety** to promote eco friendly habits among school community and integration of climate education. SWAD came out with plan to promoting **diversification of livelihood** as a mean to reduce dependency on climate in existing programme on livelihood security. SWAD decided to extend its support in **risk transfer** through microinsurance even after project deadline to experiment and retest disaster insurance for poor and disaster-affected communities as protecting measures against climate change and climatic extreme events, which is increasing in Indian coastal areas especially in Odisha, West Bengal and Andhra Pradesh.

Beyond than the above specific integration and cases, the involvement and participation of women from design, implementation and also in current actions is very important aspect which making the work very effective with ownership and commitment for constant spread of integration and education at multiple level. SWAD is became first organisation to implement CSDRM approach in existing programmes in India. The progress is assessed periodically by involved agencies including SWAD through monitoring and evaluation framework resulted from the study.

As a result, SWAD institutionalized climate smart component and beyond their members (women) are becoming sensitive to climate change and adaptation work. These women as a mother, teacher, and health worker, small and micro enterprisers, member of self help groups are supporting the integration of climate smart component in their actions.

## **5. Linking Cyclone Phailin 2013 and SWAD after implementation of CSDRM approach**

With some of the world's warmest waters, the Indian Ocean is a cyclone hot spot, out of 35 deadliest known storms in history — 27 have come through the Bay of Bengal and landed in either India or Bangladesh (Fox News, 2013)<sup>2</sup>. Less than 15 years ago, a cyclone named 'super cyclone 1999' devastated Odisha killing nearly 10,000 people and left severe damage in its wake.

Before the landfall of cyclone *Phailin*, people thought the super cyclone 1999 was revisiting them and they perceived it to bring a catastrophe to the eastern coast of India. Cyclone *Phailin* battered the eastern coast of India with torrential rain and terrifying winds on October 12, 2013 with wind speed of over 200km per hour (World Bank, 2013)<sup>3</sup>. The cyclone that affected more than 8 million made its landfall in Gopalpur in Ganjam district, Odisha. The cyclone swept through coastal states of Odisha and Andhra Pradesh, ravaging crops and infrastructure and flattening thousands of houses.

Unlike the past cyclones, cyclone *Phailin* did not extract a large number of human losses as it triggered India's biggest evacuation operation, according to Mr. Shashidhar Reddy, Vice Chairman of National Disaster Management Authority(Guardian, 2013)<sup>4</sup>. Approximately, one million people were evacuated from the eastern coast of India (Bloomberg, 2013)<sup>5</sup> to cyclone shelters, schools and government buildings. This was undoubtedly very expensive but the HFA objectives were met, lives were saved.

The state has set an example for the rest of India by using all the resources efficiently in pre disaster stage. This efficient planning of preparedness activities in pre disaster state is perhaps the greatest reason behind the minimal loss of life after the cyclone. A total of 21 lives were lost due to the cyclone while additional 23 due to post cyclone flash floods in Odisha (UNEP, 2013)<sup>6</sup>. Other reasons include the constant monitoring of weather patterns and warnings, clear instructions to district authorities, positioning of relief materials and teams well in advance, coordination with the central government for defence and other agencies' assistance. With Indian Meteorological Department constantly uploading the weather updates on its Facebook page, media and social media websites such as Twitter and Facebook played a big role in sensitizing stakeholders about the movement of the cyclone and extent of relief preparations. News channels and publications reported the incoming of cyclone, its scale and intensity, ensuring the ones who were affected had an idea of what to expect.

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<sup>2</sup> <http://www.foxnews.com/world/2013/10/13/at-least-7-killed-thousands-homes-destroyed-as-cyclone-hits-india/>

<sup>3</sup> *Cyclone Devastation Averted: India Weathers Phailin*. Available at:  
<http://www.worldbank.org/en/news/feature/2013/10/17/india-cyclone-phailin-destruction-preparation>

<sup>4</sup> *Cyclone Phailin: 500,000 homes evacuated as storm pounds India*. Available at:  
<http://www.theguardian.com/world/2013/oct/13/cyclone-phailin-india-homes-evacuated>

<sup>5</sup> *IndiaWeathers Cyclone Phailin*. Available at <http://www.bloomberg.com/news/2013-10-16/india-weathers-cyclone-phailin.html>

<sup>6</sup> *Cyclone Phailin In India: Early warning and timely actions saved lives*. Available at:  
[http://www.unep.org/pdf/UNEP\\_GEAS\\_NOV\\_2013.pdf](http://www.unep.org/pdf/UNEP_GEAS_NOV_2013.pdf)

However, it was a double tragedy for Odisha, as the cyclone Phailin induced heavy downpour that increased the water levels of major rivers flooding several parts of Odisha in Ganjam and Puri district. Economically, the amounts are humongous, both on state and households. More 21 million people across 18 districts were affected and causing widespread damage to infrastructure. Further, 860,000 hectares crops and 800,000 houses were damaged. The ports of Gopalpur and Paradip suffered losses of Rs. 446 crore<sup>7</sup>. On the other side, those living above poverty line drop into poverty thus failing state's mission to eradicate poverty. This increased the inequality in terms of income and development progress is slowed down. Further, damaged croplands and infrastructure has an impact on people's ability to access facilities such as health, sanitation and transport.

The following case studies explain the shift in the work techniques of SWAD to being climate smart than just being disaster resilient post cyclone *Phailin*:

### **a) Case Study: Risk Transfer**

Under the project 'Building Disaster Resilient Vulnerable Communities' supported by DIPECHO; SWAD was the leading facilitating agency of the project with clients and insurance company. The technical support was provided from AIDMI to set the group insurance policy with insurance companies such as United India Insurance Company (UIIC) and Life Insurance Cooperation (LIC).

*Afatvimo* (Disaster Insurance) – a financial tool for risk sharing was introduced in Gujarat in 2004 during earthquake recovery. It is a group insurance policy that covers for life and non life insurance. Vulnerable and marginalised communities are who are also the poorest suffer the most and such shocks push them further into poverty. It was found that it was an effective way to reduce risks of policyholders and offer financial protection post disasters. Thus it was replicated in Odisha with modification to deal with climatic hazards in coastal areas of Odisha. Micro insurance penetrated further into the communities of the poor, in order to accelerate the economic recovery of poor communities.

Post the cyclone, *Afatvimo* (disaster insurance) policyholders were able to make claims for the losses they incurred. Several insurance holders were able to make claims post cyclone in Puri, Odisha as they had covered themselves under the policy to protect against loss and damage to their shelter, livelihood and household items. Over 100 members from two gram panchayats from Puri district received settlement money.

**Major Challenges Encountered:** Main challenge with disaster insurance is self sustainability. The organisation needs to make the disaster insurance financially sustainable. Since SWAD is a project based organisation, at the end of the project they did not know how to carry it forward. However, they understood that the coastal community were in dire need of micro insurance and other techniques that build their capacity to be disaster resilient. Another challenge was availability of limited team members post cyclone *Phailin* - it was difficult for them to let the *Afatvimo* clients who are rural poor know that they should claim post disasters and process their claims.

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<sup>7</sup> *Phailin damage to ports pegged at Rs 446 crores*. Available at: [http://www.business-standard.com/article/economy-policy/phailin-damage-to-ports-pegged-at-rs-446-crore-113120800803\\_1.html](http://www.business-standard.com/article/economy-policy/phailin-damage-to-ports-pegged-at-rs-446-crore-113120800803_1.html)

**How to address these challenges?** To address this problem, SWAD with its team members agreed to maintain the current policyholders and help them in their interventions; and started promoting the importance of micro insurance. Even after the project completion, AIDMI continues to provide them the technical support as before. In addition, they are still scaling up to bargain for commissions from insurance companies and strengthen policy framework to put more pressure on the company. SWAD with the community members is now spreading the awareness and sensitizing people on the importance of such microinsurance and risk transfer mechanism. This will make people independent and they will not have to depend on the charity and tutelage of others. After the success from the claim settlement post cyclone *Phailin*, there is now demand from the government of Odisha to upscale the risk transfer mechanism.

### **b) Case Study: Livelihood Security and Climate Change Adaptation**

To be climate smart, DRR must be able to address both sudden-onset high impact shocks and slow onset disasters. In addition to this, it should also link with day-to-day risk faced by local communities especially in relation with livelihoods. SWAD, being located in coastal areas and working on making livelihood disaster resilient and women empowerment through capacity building; have shown commitment to make livelihoods climate smart as well. Sustainable livelihoods programmes that seek to build long-term human securities (food, livelihood, shelter and water) are critical elements in building resilience in coastal communities that depend essentially on farm economy. SWAD with focus on inform communities decided to incorporate climate and climate adaptation related information in its services to local communities and institutions including schools, PRIs, and SHGs.

**Major challenges encountered:** There is an ongoing need to develop more capacity to cope with increased variability and unpredictability in the future. However, the lack of tools to overlay knowledge about climate change and climate change adaptation makes the rural communities more vulnerable. In addition, they lack the financial ability to alleviate poverty from the community. Another major challenge was difference in understanding of the terms such as vulnerability and uncertainty between target communities and scientific definitions.

**How to address these challenges?** One of the root causes of disruption in livelihood was over dependency on climate. This was addressed by adapting climate smart methods such as use of disaster resilient varieties of crops; vertical or horizontal crop diversification; and diversifying into rural nonfarm activities. These methods will ensure that the communities adapt to climate change. Incorporating climate smart activities in each sector is lengthy but much essential process.

## **6. Lessons learnt**

1. Directly involving communities by discussing about uncertain situations due to climate change not only increases the awareness but helps to gain support of the community to implement future actions to mitigate the risks. For organisations who work at ground level, support from the community plays a significant role. This approach can bridge between humanitarian agencies and policymakers. At national

level, the authorities must create agencies that are well connected across all scales and can learn easily from each other so that there is a space for innovation and experiment.

2. Being climate smart will include climate adaptive strategies. Implementation of new agricultural practice such as varying the time of seed plantation or having mixed cultivation or using disaster resilient crops can reduce the agricultural losses. Using such practices will not only reduce their dependency on climate but will help the communities recuperate losses and offer opportunities to make more profits in following cropping seasons.
3. Enhancing adaptive capacity of farmers through horizontal and vertical integration such livestock management training, animal husbandry, fish farming will reduce the vulnerability of the community during the times of low productivity.
4. Due to the wide choice of action points, it takes time to choose the right one for the organisation and then create indicators that can be implemented at ground level.
5. It is essential to understand the local knowledge and their perception about the adaptation strategies. It must be a two way learning process where an organisation learns from the community or partners and their adaptation methods while communities and partners learn about the threats posed by climate change and new technological innovations to mitigate those risks. When implemented at national level, it is essential to strengthen people's access of information about potential impacts of climate change.
6. It is vital to communicate the CSDRM approach and disaster related information in the user friendly format. Overcoming this challenge requires a lot of attention to detail and understanding of the subject. This is very important while taking CSDRM at local level.
7. Facilitating interactions between communities, partners and other stakeholders, particularly government helps to reach a greater number of people.
8. Community members have been responding to climate change by modifying their traditional methods. Therefore, it is important to know and understand their adaptation techniques before introducing them to new methods.
9. Institutions such as SWAD should make efforts to find ways to modify the traditional techniques to make them user friendly and climate smart. Local institutions have high interest in institutionalising CCA component, however, facilitation, availability of key tools and enabling environment are key issues.
10. Some adaptive techniques such as relocation of villages are easier in theory, however very difficult to implement where the lives of people are heavily dependent on the coastline or land or river. Implementing institutions at local level can offer adaptive techniques are user friendly and plans must be flexible so that they are easier to implement. Integration in all sectors should always be a priority to avoid any cascading effects on the community.
11. Develop climate awareness at local level become first step towards becoming climate smart for institute working with local communities that prone to climatic hazards. People may aware about impact of climate change but not with the root causes of climate change and contribution actions that they could make to mitigate.

12. It is important to understand how the local community and involved stakeholders understand and perceive the meaning of different climate related terms. The existing local capacities and adaptive capacities should be studied for better implementation of CSDRM with local communities.
13. Further, when implemented at national level it is essential to ensure that all the developmental plans must factor in climate change and its potential impacts so that the new infrastructure can withstand the shocks.

## **7. Conclusion**

Population is continuously rising, and the planet can no longer afford the reckless and environmentally disastrous system. It is essential to include all the members including children in climate smart activities so that each one of us can play a critical role in tackling the issues for climate change and sustainability. No government will be completely able to handle all the challenges and threats that natural disasters pose. No matter how strong the policies on disaster risk reduction and climate change adaptation are; a multi stakeholder approach is necessary to handle multiple risks at different levels. Thus, all governmental and nongovernmental organisations at different levels must start integrate Climate Smart approach in all its activities; only then will the risks will be reduced.

Being climate smart is the first step to prepare communities and especially children to deal with problems of climate change so that they can come up with solutions in future. This can be done through the CSDRM approach which not only facilities the process of analysing whether the existing programs and initiatives are climate smart are not, it also facilitates that identification of the pathways of integration that can help institution in ensuring resilience. The CSDRM approach was developed with DRM practitioners and policymakers in mind; it is evident from the research that it has uses beyond target community (IDS, Christian Aid, et al, 2010). The CSDRM approach will bridge the links between humanitarian practice and policy and areas of development which are seeking to deal with underlying vulnerabilities and exposure to hazards. Disaster and development organisations must see themselves as learning agents

India is unique in its rich cultural heritage, diversified geographical and climatic conditions, with the snow covered mountains (Himalayas) in the northern side and rain forests in the south, the Indo-Gangetic Plains, the Deccan Plateau, the major life-giving Rivers which make the areas fertile, deserts on the western side, drought prone areas and long stretches of coastal areas. However, in the past few years India has experienced adverse effects of climate change in form of disasters. The bottom line is we need to change our way of thinking and adapt in the face of this ever-present reality of more disasters and their devastating toll on people's lives. We can make a difference in the face of indifference.

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