



## **Interlinkages between climate change and sexual and reproductive health**

### **Purpose**

The advocacy brief will help to give the ground situation about the impact of climate change and its impact on sexual and reproductive health. This can be used by advocates, planners and policy makers in the government and other organisations working in the field of climate change and sexual and reproductive health and rights (SRHR) to get ground reality on the issues and impacts of climate change and sexual and reproductive health rights and design and execute the projects accordingly.

### **Introduction**

In the context of Nepal, the interlinkages between climate change and SRHR are not explored. The inter-linkages between climate change and SRHR is a new issue to the government, international non-government organisations, non-government organisations and civil society organisations. In this situation, the community people have not yet identified the impact of climate change on sexual and reproductive health (SRH). Therefore to address the gap of the knowledge on the impact of climate change on sexual and reproductive health, the research has been conducted.

Reviewing the government's climate change policy, showed that the government do not have any policies addressing the linkages between climate change and SRHR. There are separate policies on climate change which is looked after by the Ministry of Environment Sciences and Technologies, and the policies on sexual and reproductive health which are looked upon by the Ministry of health. As climate change and SRHR issues are interrelated, impacting women's health and livelihoods. Hence, it is important to have policy coordination and integrated response to the field realities from government's side.

### **Approach and Findings**

The study was conducted in Udyapaur, Morang and Sunsari districts of Eastern development region, Dang and Salyan from Mid-western development region and Kailali from far western development region. The study focused on collecting the primary data, through household questionnaire survey, focus group discussion and key informant interviews based on the perception of the women farmers and relevant stakeholders. The collected data were then analysed and presented.

Altogether, 320 household surveys, 10 FGDs and 15 key informant interviews have been conducted. The respondent of the research were only women farmers as the study focused to look upon the impact of climate change on sexual and reproductive health. The SRHR issues are still hidden at the community level because it is regarded as sensitive issue and there is a social taboo to talk on SRHR openly.

The analysis of the data showed that the women and girls are the one mostly affected by adverse impact of climate change. The major reason behind this is increased frequency of the natural disaster which increased the work burden on women. This has forced the girl child dropout from school, which has hindered their process of getting empowered in the long run. The adolescent girls

and women are the ones taking care of their family members during crisis and to take care of the sick family members. The destruction of the natural land and forest has made the women to walk off to far up distance to fetch drinking water and firewood which has increased the incidence of violence against women especially sexual violence. This increased physical and mental stresses on women have directly impacted their sexual and reproductive health. The impact of climate change on agriculture has triggered the situation of food insecurity, hunger and malnutrition. The research also revealed that all the women eat only the left overs during the food crisis which has direct impact on their sexual and reproductive health. The study also illustrated that most of the women did not get nutritious food which resulted in anaemia, pregnancy and delivery problems, increased rates of intrauterine growth retardation, low birth weight and perinatal mortality. This has forced the women to work as a labour which again has impact on their sexual and reproductive health as they need to carry on heavy loads. The changed climatic condition has also changed the behaviour of the woman, which affected them especially during their pregnancy.

The research revealed that the recent flood that occurred in Dang in 2014 caused trauma and psychosocial problems among the women causing irregular menstrual cycle, white discharge and abdominal pain. The interaction showed that during the flood in Dang large numbers of women were displaced and due to the loss of shelter, women had to sleep in a common place which led to unwanted sexual relation and sexual violence. The limited use of family planning devices has resulted in unwanted pregnancy, unsafe abortion and uterine prolapsed among the women of reproductive age. Due to poor health condition and increased need to manage household chores in the new and displaced environment, women and girls have limited time to get engaged in productive work and income generation, which, when coupled with the rising medical expenses has resulted into illness and heightened the levels of poverty and vulnerability. Therefore, sexual and reproductive health services must be an integral part of short- and long-term government planning processes. Such policies and targeted interventions will help ensure that public service provision, such as education and health care, is adequate, and will also ensure efficient government stewardship and regulation of housing, job markets, agriculture, natural resources and public goods. They were not able to seek the services as well since they could not walk to the far odd distance due to their problems.

Since women are the main collector of water they are exposed to water borne diseases due to climatic changes which affects their reproductive health leading to high infant mortality rate. Due to the change in climatic condition, young girls are one of the first to be affected by economic hardships and they come out of school in times of hardships which affects their SRHR due to work burden and lack of knowledge on their SRHR. There is increased need of food and water during pregnancy and lactating period but lacks of these have high impact on SRHR. They further added that the pre-existing gender inequalities further limit women's economic recovery after a disaster.

The study also revealed that the low productivity of the crops due to climate change have forced the farmers to use hybrid crop varieties which requires intensive chemical fertilizers and pesticides. Since women are the ones involved in all the agricultural activity besides ploughing, they are exposed to chemical fertilizers and pesticides but did not take any precaution while using fertilizers and pesticides in the field. Therefore they have been facing the problems like disturbance in menstrual cycles, cancer in uterus, miscarriage and infertility.

The direct and indirect impacts of climate change on the sexual and reproductive health of women and girls needs to be identified and addressed on time as the loss of health not only results into loss of efficiency but also results into different forms of violence against women and girls making them more vulnerable and disempowered in the long run.

There were certain adaptation strategies identified to cope up with the adverse impact of climate change during the study which is listed below:

**a. Early Warning system**

In flood affected areas of the Kailali and Udayapur districts, Local Disaster Risk Management Committees were formed which were responsible for reading gauging posts. Readings were taken only during monsoons and events of torrential rainfall. In each district, the committee had to inform communities, including disaster management line organizations in district headquarter. The committee was provided with a CDMA phone by the INGO for the purpose. Similar, setup had been established in upstream and they were informed about prevailing conditions in upstream through headquarter. The communities were alarmed after water level rose above a red mark on the posts.

A manually operating siren had been donated by INGO (Mercy crop and Luthern Nepal) as an early warning system. During group discussion, participants told that this was crucial for informing and gathering people. This was effective in alarming other nearby communities as well. Moreover, people were trained to escape along with their important documents such as citizenship card, land ownership documents etc. During flood events, people lost their lives because they did not have any access to early warning system. Early warning system allowed communities to prepare well in advance. During group discussion, people told that flood level in 2008 had rise so fast that they did not have enough time for preparation. However, there were no human casualties since everyone had practiced evacuation process during pre-monsoon. This showed that disasters are unexpected and cannot be overwhelmingly relied on single approach. Such preparation practices are necessary for raising awareness to strengthen disaster risk management.

**b. Change in Varieties of Crops**

The major cereal crops like rice are grown in the study area. The change in temperature and rainfall has decreased the yield. Therefore, the farmers have been motivated towards the adoption of the improved and hybrid varieties. Altogether 92 percent farmers in the study area reported to have changed the varieties of crops against 8 percent farmers not changing the varieties of crops at all. The improved rice varieties like Barkhe- 1785, Chaite-350, Masuli, Makawanpur-1 and Hardinath-1 have been cultivated in the study area. Similarly, maize varieties like Rampur Composite, Deuti, Sitala and Manakamana are in use. However, it was reported during the FGD and key informant surveys that climate change solely is not accountable for the change in varieties of the crops. Change in climatic patterns along with other factors like increased productivity and early maturing of the crops made farmers to make changes in the varieties of crops.

One of the important conclusions of the field survey, FGD and key informant interviews was that the majority of the farmers preferred vegetable crop production rather than cereal production. This was because profit gained from vegetable crops was thrice as much as that from the cereal crops. The other reason was that vegetables could be harvested in short time and the growers could get income easily at high rate of return. The vegetable farming was done in plastic tunnels by mulching to conserve the soil moisture. The farmers made usage of organic manures and insecticides to enhance the fertility of soil and to control the insects, pests and diseases.

**c. Changes in Cropping Calendar**

The farmers in the study site reported that they had implemented modifications in the cropping calendar owing to the variations of temperature, rainfall and relative humidity. The changes in the cropping calendar varied from 15 days to one month. But the change in climatic pattern alone cannot be considered for the shift in planting time as there was modification in the varieties of the crops as well. Almost all the respondents mentioned changes in the planting time of major cereal crops like paddy, maize, wheat and finger millet. This in turn led to the shifting pattern of other major crops like potatoes and mustard.

#### **d. Out migration**

Majority of the respondents reported that out migration helped them to gain the food security situation. They reported that agricultural production has been declining rapidly therefore they are forced to take into other alternatives to sustain their livelihood.

#### **e. River bed farming**

The organizations working in the study areas have trained the farmers for riverbed farming in the flood affected areas. This has helped the farmers to cope with the adverse effect of climate change and make some income to sustain their livelihood.

#### **f. Construction of plastic ponds/mulching**

The farmers reported that during water scarcity situation, they have been collecting the water in the plastic pond which can be used for irrigating their crops in the dry season of the year. Mulching has been practiced to conserve the soil moisture.

### **Conclusion**

This study on interrelationship between climate change and sexual and reproductive health has been conducted in six districts covering eastern, mid-western and far-western regions of Nepal. The method of selection of the respondents is random. Since the research on climate change and SRHR is new in the country the focus is made completely on qualitative data based on perception of those who are directly affected from natural disaster and changing weather pattern as a result of climate change.

The natural calamities and disaster have increased workload of girls and women resulting into lack of time and resources available for sanitation and personal hygiene which directly affects them especially during their pregnancy. Due to the natural disasters the women members in particular suffer from hunger and malnutrition. The increased workloads results in withdrawing daughters from schools to help out at home, reducing their future opportunities. The low productivity of crops due to climate change have forced the farmers to use hybrid varieties of crops which requires intensive chemical fertilizers and pesticides which has direct impact on sexual and reproductive health. They have been facing problems like disturbance in menstrual cycles, white discharge, cancer in uterus, miscarriage and infertility. A decade or 15 years ago, women who gave birth to 7-8 children were found to be healthy but now women who gives birth just to 2-3 children has a weak health condition which revealed that increased use of the fertilizers and pesticides due to changed in climatic pattern have direct impact on sexual and reproductive health. Travelling long distances to fetch water and firewood has resulted in prolapsed uterus among women. The poor health condition of women limits income generation and restricts their utilisation of health posts for their sexual and reproductive health. The pre-existing gender inequalities further limit women's economic recovery after a disaster. The impact of climate change on agriculture, food security and sexual and reproductive health has limited the opportunities of women in every aspects of life which has resulted in violence on women

## Key Recommendations

### Recommendations at the household level

- Increase awareness about risks of climate change in overall livelihoods and sexual and reproductive health of women and girls; short and long term preparedness and mechanisms at household levels to reduce the risks.
- Organise and equip farm households, especially women with knowledge, skills and technologies for addressing sexual and reproductive health issues during the disaster and diversifying options at household levels for better adaptation.
- An example for adaptation that is often related to food security of girls and women is increasing biodiversity in the farm and home garden to cope with crop failure. Examples of adaptation to reduce work burdens introducing water harvesting technologies that reduces the scarcity

### Recommendations at the community level

- Help local communities to create stronger local institutions by providing external support (mainly technical and financial) to effectively improve food production, access and utilisation and adapt to climate change and ensure SRHR.
- Membership to local institutions, participation in local development activities and withdrawing from traditional inequity practices will bring positive outcome for whole community and improve the coping capacity against climatic disasters.
- Equip local communities, especially women groups and cooperatives with knowledge, skills and resources for disaster risk reduction and management (including the ways of reducing vulnerability, SHRH issues, relief and rescue)
- Diversifying livelihood strategies instead of over-relying on single income source is necessary to build adaptive capacity to climate change.

### Recommendations to the government

- **Ensure universal access to SRHR information and services:** A safe, accessible and quality reproductive health service sufficient to meet the needs of women throughout their life-cycle is needed. There should be comprehensive, non-discriminatory reproductive and sexual health care services within favourable environment for the youth. The State must ensure that the reproductive and sexual health information and services reach women of all ages and groups.
- Manual Siren System should be replaced with mechanical system.
- **State should move beyond 'project based approach' and ensure accountability:** State should move beyond 'project based approach' and incorporate human rights dimensions/perspectives in the reproductive health initiatives. Human rights accountability must be supplemented with access to remedies for sexual and reproductive rights violations and complain mechanism established by the Government.
- **Ensure coordination at all levels:** Government should create effective coordination mechanism to deliver appropriate sexual and reproductive health care to all women and adolescents. Coordination structure needs to include civil society members; specially women right organisations and prioritise activities to address structural inequalities which marginalise women.
- **SRHR needs to be dealt with through multi-sectoral approach:** Gender analysis of poverty is needed to address the economic, structural and root causes that deprive women in the first place. Similarly, women's right to natural resources, land and employment needs to be ensured. Further, to address practical needs such as food security, food sovereignty and poverty in line with SRHR, proper linkage and comprehensive planning needs to be established with different ministries such as agriculture, health, women's ministries etc.

- Integrate VAW in women's reproductive and sexual health policies and programs and ensure adequate resources for their implementation.

### **Recommendations to UN and other development partners**

- Establish more partnership with women rights organisations to effectively address SRHR. Women's empowerment (Social, Economic, and Political) should move parallel to SRHR initiatives. Unless SRHR is assured all other human rights (civil and political, economic and social) have limited power to advance the well-being of women and vice-versa.
- UN and development partners usually work in partnership with local NGOs and civil society actors. They can be mobilized for massive awareness on the topic of climate change and reproductive health impacts, ways of mitigating them or address them. These awareness campaign can complement to government efforts as well.
- The funding partners should emphasise much more on awareness and sensitization program so that the information on impact of climate change and SRHR can be disseminated to large mass of people and people get sensitized on the issues.
- Emphasise sexual and reproductive health and rights related issues through right-based policy frameworks and support civil society organisations to make communities aware of the rights and government central bodies (parliamentary committees, central level ministries) and to civil society groups to work as watchdogs representing people voice.

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