

INTERNATIONAL COMMISSION ON IRRIGATION AND DRAINAGE (ICID)

Water secure world free of poverty and hunger through sustainable rural development

ICID Young Professionals e-Forum (IYPeF)

Gendered Impacts of Climate Change on Agriculture

Background Note for Discussion

16 May to 3 June 2017

Introduction

Climatic change is expected to cause severe impacts on agricultural food production systems. As a result, from rising sea level to agricultural shortfall and urban floods, the world is facing the effect of climate change. Yu et al. (2010) mentioned that climate change could lower agricultural productivity by 16-26% in Thailand, 2-15% in Vietnam, 12-23% in the Philippines and 6-18% in Indonesia. The impact is particularly acute for women, who comprise the large share of the community that depend on the natural resources for their livelihood. Two-third of farmers in the developing countries are women, whereas the share is 90% in Africa. Women's livelihoods are highly dependent on natural resources. The livelihoods are heavily threatened by climate change since most women - especially in households in rural areas - have mostly the domestic responsibility for food production, collecting and storing food, fuel for cooking and heating, feeding their families, as well as water for all domestic uses.

Climate change is an important factor in agriculture since it can affect every step of the crop's growth. When weather patterns are erratic, women spend more time on each of these tasks, which means less time is spent on education, development work, health etc. In the context of climate change, traditional food sources become more unpredictable and scarce. Women face loss of income as well as harvests—often their sole sources of food and income. They need, therefore, to be involved at all levels in the climate change mitigation and adaptation attempts.

Climate change does not affect everyone in the same way, and the impacts differ by gender. The responses to the impacts of climate change also differ by gender, especially when it comes to safeguarding food security and livelihoods. Although women are important food producers, providers, and great agent of social change due to their central role in agriculture, they have limited access to resources and limited control of resources. State of Food and Agriculture 2010-11 estimated by Food and Agriculture Organization (FAO) report (FAO, 2011) stated that more than 100 million people could be lifted out of poverty if women had the same access to and control of resources as men. Therefore, responses to climate change in agriculture must be gender-specific. Initiatives need to ensure that women are included in climate change mitigation and adaptation activities and strategies designed to enhance food security and livelihoods. To date, however, there has been little focus on how men and women mitigate risks and adapt to challenges brought about by climate change. UN Vietnam (2009) mentioned that the productive, reproductive and community spheres are the three areas where Women face challenges from climate change. World Bank (2010) reported that agriculture has been increasingly feminized in terms of production, where 62% of women versus 52% of men engaged in agricultural production. Thus, it clearly indicates that more women face risks from climate impacts to the agricultural sector. Being food producers, women have high dependency on land and natural resources for agricultural livelihood generation that makes them more vulnerable. Higher risks and greater uncertainty in agricultural production due to weather patterns change and increased incidence of extreme weather conditions such as droughts, heavy rainfalls and cyclones/typhoons, among others will directly affect to women's agricultural activities. Climate change induced water and food insecurity increases the work load of women involved in subsistence farming, as they had to spend more time and effort on managing their agricultural fields. So, in the context of resource scarcity and weather extremes, women are more vulnerable as compared to men.



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Regarding the important role of women in agriculture, migration of male farmers would cause additional burdens on women. Usually, male farmers are found to be concentrated on land preparation, transportation, plantation and pesticide spraying in agriculture sector. So, if men migrate due to environmental crisis and natural disasters, all agricultural works will have to be handled by women who are left at home. It would make overburden for women in agricultural activities, as they are traditionally responsible for food security. When male farmers would migrate as a consequence of climate change impact on agriculture, women and young girls would have to be more busy in collecting water for household use along with additional responsibilities in the agriculture sector. Most importantly, lack of availability of men labour force will result in young girls dropping out of school to help the family with agricultural activities and collecting water.

Therefore, undoubtedly, successful action on climate change adaptation and mitigation depends on engaging women as stakeholders and planners as well as in decision making, ensuring that both women and men have access to and control of the resources they need to adapt to and mitigate climate change. Gender inequality and women empowerment are the vital in any sustainable development work.

Discussion outcomes

- 1. How women engaged in agriculture are affected by climate change?
- 2. What gender specific mitigation/adaptation measures can be taken to reduce the adverse impacts of climate change?
- 3. What specific measures in the Irrigation & Drainage sector can be taken to reduce the additional hardships that results in the life of women due to climate change?

References

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