

# Women's Participation in Community Based Disaster Risk Reduction and Climate Change Adaptation

(The Case of Thanh Hoa Province)

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**Abstract:** Recently researches on impact of climate change (CC) to Vietnamese women have been conducted at various scale and gender equality has been taken into account in process of planning and implementing interventions in climate change adaptation; women have been taking active part in disaster risk reduction and climate change adaptation (DRR&CCA). However, their roles have not been recognized as much as their contribution. Based on theories relating to gender, environment and development and interaction between disaster, climate change and gender equality, the paper discusses role and the participation of women in community-based disaster risk reduction and climate change adaptation. The paper uses secondary data and observation to analyzed the role women play in (1) planning and decision making at grassroots level, (2) technical assistance in disaster risk reduction, (3) capacity building, an (4) climate change adaptation livelihoods. From the findings, authors recommend on how to promote women's role and gender mainstreaming as a solution to promote gender equality in community based disaster risk reduction and climate change adaptation activities<sup>1</sup>.

**Keywords:** Gender; Participation; Women's role; Disaster risk reduction; Climate change adaptation; Community based.

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## 1. Introduction

Natural disaster and climate change are serious problems to every country, especially to Vietnam - one of most disaster prone country. World Bank Gender Analysis in 2001 estimated that about one million people in Vietnam are affected by disasters annually (World Bank, 2011).

The Government of Vietnam has been considering climate change and natural disasters as key challenge to poverty reduction and socio-economic development United Nations in Vietnam (2010), therefore it has issued various policies and program namely Law on natural disaster prevention and control (2013), National Strategy on Climate Change Adaptation, National Plan on Climate Change Adaptation period 2012-2020, national model scheme of community based disaster risk management. A climate change and sea level rise scenario for Vietnam has been developed to suggest socio-economic development plans corresponding climate change and sea level rise trend in basic trends. Above mentioned documents are basis for government agencies and local authorities to develop their plan of action to adapt to potential impacts of climate change in the future.

As a half of population, women are not only people affected by natural disaster but also important actor in DRR&CCA. While being vulnerable to disaster because of their reproductive role and limited access to support due to gender stereotype, women play significant role in family and community because of their strong network which can be an important resource in DRR & CCA. Therefore, women empowerment in disaster risk management (DRM) is important to meet their own demands as well as to enable them to support family and community to be resilient to extreme weather events due to climate change.

Gender and climate are two interrelated issues of top concern, however, there is a lack of researches and reports on women's participation in DRR & CCA and as a result, there is a gap between policies and practices of enabling women in DRR & CCA. Women's capability, demands and vulnerability need to be taken into account, and their voice and representation need to be ensured in all DRR & CCA policies and actions in order to improve their resilience (United Nations in Vietnam, 2015). This article aims at contributing to theoretical and

practical evidences for relevant agencies in DRR & CCA planning and policy making to take into account in their working process.

## **2. Literature review, theories and methodologies**

Community based disaster risk management and climate change adaptation (CBDRM & CCA) is an important approach in disaster risk reduction and climate change adaption in developing countries since community members are the ones who know best their potential impacts of natural disaster to their livelihoods and community, hence, understand the most suitable solutions to their community.

A process of disaster risk management in which at risk communities are actively participating in the assessment, analysis, planning, implementing monitoring and evaluation of disaster risks in order to reduce their vulnerabilities and enhance their capacities, especially in context of climate change (MARD & UNDP 2015). Community based CCA is a process aiming at community at risk, based on their priorities, demands, knowledge and capabilities to empowering them in planning against potential impacts of climate change. Community based CCA takes into account potential impacts of climate change to livelihoods to reduce the vulnerability to natural disaster by combining local knowledge and scientific knowledge on climate change and its impacts (ADC, 2014). In this article, women's participation in CBDRM & CCA is confined to some aspects namely: planning and decision making at local level; technical assistance, capacity building, livelihoods relating to mangrove planting.

Women's role and participation in DRR & CCA in Vietnam have been mentioned in a number of researches and reports. The review of Gender mainstreaming in National strategy of natural disaster prevention and control by 2020 and National Plan of CCA in Vietnam (Vietnam Women's Union, Oxfam Hongkong, 2010). reveals that both documents neither not mention gender mainstreaming nor provide guidelines for gender mainstreaming in DRR/CCA; as well as not assign specific responsibilities for Vietnam Women's Union and other agencies responsible for gender equality. According to a Knowledge - Attitude - Practices survey on DRR & CCA in 2 provinces of Phu Yen and Binh Dinh by Vietnam Women's Union in 2011, gender disaggregated data show that capability of women and girls in responding to

disaster is lower than their male counterpart while it confirms important role of women in DRR/CCA activities in the localities (Vietnam Women's Union, UN Women 2011). Although gender is somehow integrated into DRR plan, gender demands and other issues in 3 phases (before, during and after natural disaster) are not fully reflected. Active participation of community in general and women in particular in decision making remains limited.

A policy brief on gender equality in climate change adaptation and disaster in Vietnam conducted by United Nations and Oxfam (United Nations and Oxfam, 2011) confirms that: (i) Women in Vietnam are active actors in DRR/CCA; (ii) Gender roles, interests and contributions of women in families, communities and working place need to be taken into account and reflected in related policies and actions; (iii) awareness raising and skill improving on gender mainstreaming and enhancing women's' role in DRR/CCA becomes urgent in Vietnam; (iv) Awareness on gender mainstreaming needs to be translated into political commitment and financing to ensure gender sensitivities DRR/CCA

A study on social relations in disaster risk management in Vietnam shows that women's participation in DRM benefit community, families and women themselves. For instance (1) DRM activities by community is more effective with more participation of women because their practical needs are considered; (2) loss due to disaster at household and community levels is minimized when women's knowledge and experiences in protecting harvest, property is made use; (3) life's quality of family members is improved with enhancement of women's role and contribution; and (4) women status in community is improved when their capability in DRR is maximized. As a result, their more active participation in community meetings increase social equality and challenge gender norms on women's capability (Vu Minh Hai, 2004).

Gender assessment in relation with project Improving the resilience of vulnerable coastal communities to climate change related impacts in Viet Nam by UNDP (GCF project) provide basic information on gender, gender inequality in Vietnam regarding gender roles in family and community; women in labor force, in leadership as well as their vulnerability in the context of climate change (Green Climate Fund, Viet Nam, 2018). An updated gender assessment report by UNDP (2018) reveals more dimensions of gender, gender

inequality, gender issues in DRR&CAA at national levels; provides analysis on opportunities and challenges in gender mainstreaming the implementing the project. Both reports recommend to enhance the role of Vietnam Women's; Union in facilitating gender mainstreaming in all process of the project while making use of wide network to all commune and diversified actions that the organization are working on.

In shorts, most of researches confirm that women have been taking active part and contributing significantly to DRR/CCA; recommends that DRR/CCA policy making should go hands in hands with gender mainstreaming in activities of all related agencies. However, gender issues and women's contribution in DRR/CCA have not been recognized by policy makers due to limited communication, social awareness, implementation mechanism...

This article applies theories of gender and environment, which set gender roles, gender relations in the context of relation between human being and environment, how gender stereotype influence the way community people, men and women react to change in natural environment. Therefore to explain why and how natural disaster, climate change and gender are inter-related and therefore, gender mainstreaming is basic means to enhance women's participation in CBDRM&CCA. As a result, Vietnam Women's Union comes into the picture as a representing agency that network and tap the potentials of various women's groups in DRR/CCA.

Literature review is the key methodology for this article including review of various international and national researches and papers on gender equality, gender mainstreaming in CBDDM & CCA. Existing researches provide very helpful and relevant argument and findings for this article. Based on existing research, this article identifies dimensions of women's participation in CBDRM&CCA.

In addition, this article also uses data from gender baselines survey of 100 communes in 7 provinces of Thanh Hoa, Thua Thien Hue, Quang Ngai, Quang Binh, Quang Nam, Ca Mau and Nam Dinh in the project "Improving the resilience of vulnerable coastal communities to climate change related impacts in Viet Nam" conducted by VWU component project in September 2019; in which authors use Thanh Hoa province as case study (with data from 36

communes<sup>2</sup>) in relation with other provinces. Our research based on secondary data, therefore inconsistency of data both in terms of time collected and data format, representativeness (data not reflect general situation of the whole province) are inevitable. The participation of women has been improved since the start of the project, however, it might not be properly reflected in this article.

### **3. Promoting women's participation in community based disaster risk reduction and climate change adaptation**

#### ***3.1. Women's participation in planning and decision making regarding CBDRM&CCA at local level***

Planning for CBDRM is the participatory process where community involve in identifying specific solutions and resources as well as assigning responsibilities in the eruption of disaster in order to minimize the negative impacts of disaster. In other words, this process includes priorities of various community groups, especially vulnerable ones, into local plans such as Plan for floods response, annual and 5 year socio-economic development plan, local disaster prevention and control plan.

CBDRM planning process consists of: Drafting (commune authority draft plan based on disaster risk analysis report conducted by Technical group); Consultation for inputs of community on the draft plan; Finalizing and approving the plan. It is required that gender to be integrated in this plan through mentioning gender needs in disaster risk analysis report; identifying gender responsive solutions (in priority order that include both practical and strategic needs) to ensure gender equality in disaster risk prevention and control (MARD, 2015).

Literature review shows that despite remarkable efforts in legal framework to enhance the participation and decision making of women in family and social life, there remains gender gap in planning and decision making regarding

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<sup>2</sup> Communes namely: Hoang Thanh, Hoang Truong, Hoang Phu, Hang Hai, Hoang Tien, Hoang Dong (Hoang Hoa district); Nga Tien, Nga Thuy, Nga Nhan, Nga Bach, Nga Hung, Nga Yen, Nga Truong, Nga Linh, Nga Van, Nga Phu, Nga Tan, Nga Thien, Nga Vinh, Nga Thach, Nga Thanh, Nga An, Nga Hai, Nga Thang, Nga Giap, Ba Dinh, Nga Trung, Nga My, Nga Dien, Nga Son town (Nga Son district); Ngu Loc, Da Loc, Hung Loc, Minh Loc, Hoa Loc, Hai Loc (Hau Loc district).

program and activities on DRR&CCA. “Women are underrepresented in all levels of Central Committee for NDPC (natural disaster prevention and control)” (UNICEF, Prudential, MARD 2018), moreover, their voice are not taken into consideration when planning. Many agencies and their staffs involved in DRR do not believe in benefit of taking separately women’s and men’s needs and capability into consideration. Many activities in DRM is considered as “heavy work” or “men’s work” (United Nations, 2013). Women’s role is not explicitly mentioned in DRR&CCA policies.

However, recently, officially assigned as member of Committee for disaster prevention and control at all levels, Women’s Union affirm its role and voice as representing agencies for women in DRR&CCA. In Thanh Hoa province, Women’s Union is a member of Committee for disaster prevention and control at all levels. However, the number of women in that committee is rather low because the committee consist of head or vice head of government agencies and mass organisations, who in most cases, are men. In all 36 communes in Thanh Hoa province, women account for 26% of member in Committee for disaster prevention and control (291 women out of all 1128 members). Though low, this percentage still higher than other communes of provinces namely Ca Mau (14%), Hue (15%), Nam Dinh (18%), Quang Binh (19%), Quang Nam (19%), Quang Ngai (18%). The low percentage of women in decision making body of disaster prevention and control show the urgency to increase the representativeness of women for more equal contribution of women in DRR&CCA.

Data from 100 project communes (including 36 communes of Thanh Hóa) show that 50.5% of community people in disaster risk assessment and 35.5% of community meeting facilitators are women. However, when looking at team leaders of disaster risk assessment, the percentage of women fall down to only 6.7%. This means that more women taking part as member as well as facilitator in community meetings do not automatically translate into more women in leadership. Despite rather ambitious legal framework on gender equality and DRR&CCA, the lack of clear guidelines on how to increase women’s participation in at higher levels for substantial gender equality is urgently needed.

### ***3.2. Women’s participation in technical assistance in CBDRM at local level***

Technical assistance on CBDRR&CCA at commune levels in this article confined to taking part in rescue team, in technical team, community group and communication team for DRR&CCA.

Statistics in 36 communes of Thanh Hoa show that women in rescue team account for only 9%, which is lower than in other provinces like Thua Thien Hue, Nam Dinh, Quang Binh (which are sites of various DRR projects). Key reason is the strong belief that rescuing work is “not appropriate for women”, “women are physically weak”, or “priorities men”. If they are in rescue team, they are assigned to gender stereotyped work (medical assistance, communication, caring for rescued people...). This is explained by the reason that when assigning tasks, people often think that women are more suitable for logistics work, in addition, may be women themselves do not want to because they think this is a dangerous or inappropriate work.

**Table 1. Women in rescue teams**

<b>Province</b>	<b>Number of rescue members</b>	<b>Number of women</b>	<b>Percentage of women</b>
Ca Mau	219	19	9%
Hue	1,198	152	13%
Nam Dinh	700	85	12%
Quang Binh	431	83	19%
Quang Nam	927	81	9%
Quang Ngai	500	76	15%
Thanh Hoa	4,009	377	9%

Source: Gender baselines survey for GCF project.

In all 36 communes, Women’s Union staffs take part in technical team and community team for DRR but the percentage in technical team is lower than in community team because technical team are set up by local authorities and consist of leaders of local mass organizations, who again mostly are women.

In communication activities, women role is more visible as it is considered as strength of women. The Women’s Union with wide network down to community, can directly work with women to understand their needs as well as to identify most vulnerable group and the consequences of disaster for informing better policies. Since women understand best their family demands, the local Women’s Union can take more part in before, during and post disaster periods such as: identifying vulnerable areas, classify community groups for specific support, gathering demands of community people, identifying

beneficiaries, providing foods and necessities, providing first aids, care for wounded people, cleaning and restoring production... In Thanh Hoa, Women's Union provides swimming classes for women and girls, instruct women to prepare for disaster following 4 "on-the-spot" principle<sup>3</sup>, instruct them signs of disaster for safe evacuation, providing knowledge and skills in food safety, individual hygiene, reproductive health care in context of disaster, assisting women to evacuate at the call of local authorities... With strong understanding of own community, women can contribute significantly to planning for disaster prevention and control.

"4 on-the-spot" principle in DRR is in line with Women's Union principle of "down to grass-roots level", therefore the participation of women's union in DRR as well as other community development activities create a synergy in community based activities.

### ***3.3. Women's participation in capacity building on CBDRM&CCA***

The Thanh Hoa provincial Women's Union provide various training on DRR&CCA separately for women only. In 2020, they provided 2 training on gender in CCA, 04 meetings of groups of climate change resilient livelihoods for 224 participants who are president, vice president and women in coastal communes Hau Loc and Nga Son districts.

General statistics on training at all levels in GCF project shows that by end of 2019, women trainees account for over 30%, commune women staffs in training of facilitators make up 40.1%. In Thanh Hoa only, the percentage of women participants are 41.7% and 56.3% in training of facilitators and local people respectively.

In various CBDRM trainings in GCF project in Thanh Hoa, women participants' rate in the communes ranges from 30% to 58% (DARD of Thanh Hoa province, 2019) Women being trained on DRR&CCA account for over one third of participants in all 36 communes of Thanh Hoa province, which is a good basis for gender mainstreaming as well as gender awareness raising.

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<sup>3</sup> Leadership on-the-spot, Human resources on-the-spot, Materials on-the-spot, Logistics on-the-spot .

**Table 2. Women participation in component of data development**

	<b>Number of beneficiaries</b>	<b>Percentage of women</b>
Training of central and provincial trainers	179	37%
Training of local facilitators	2,119	32%
Community based disaster risk assessment	13,241	48%

Source: Gender baselines survey - GCF project.

For capacity building and awareness raising, Women's Union also use internet and social media to share information from fanpage of Authority for Disaster Risk Management to update weather information as well as skills for disaster risk reduction.

Women participation on training on DRR&CCA are on increase at local levels, however, their participation in technical assistance remains limited in comparison with their ability and actual contribution.

### ***3.4. Women's participation on climate change adaptation livelihood and mangrove planting***

Global researches confirm that severe impacts of climate change on various social groups are widening gender gap and violence against women. Women status tends to reduced even when they take active part in DRR&CCA, especially in the context where women's access to livelihoods resources is more limited than men's (United Nations in Vietnam, 2010).

Natural disaster and climate change also directly affect strategy and form of household livelihoods and individual family members, especially in agricultural sector where livelihoods depend much on natural resources.

Research conducted in mountainous areas of Vietnam show that women tend to depends on forest as livelihoods and fuel resources for their families and climate change reduce their ability to seek for needed natural resources (Ireson-Doolittle and Ireson, 1999). To adapt to climate change, two key livelihoods adaptation strategy are income diversification and reform the existing work. Which strategy to be chosen depends on specific local situation. In Thanh Hoa

province, the Women's Unions are implementing climate change resilient livelihoods scheme such as cooperative for garbage collection and environmental protection (Quang Xuong, Trieu Son, Quan Hoa); cooperative group of handicraft or cow raising (Nga Thuy communes, Nga Son district)...; replicating schemes of bee keeping, raise shrimp with crab, duck and chicken raising in line with biological safety rules (Nga Son and Hau Loc districts). These livelihoods activities contribute to income generation for women and local socio-economic development.

Aware that mangrove is the lifebuoy for people in CCA, especially in context of sea level rise, mangrove planning become priority program in coastal areas, including Thanh Hoa province. Data from 100 communes in GCF project show that women account for 26% (of the total number of participants) in livelihoods training. Women have income generation activities from mangrove planting account for 40.1%. Women also make up 46.2% of people being consulted for mangrove planting. In Thanh Hoa province alone, women make up as much as 60% of labor force in mangrove planning. These achievements are thanks to clear guidelines on gender mainstreaming and well defined gender action plan of the project.

#### **4. Recommendations**

Women in disaster prone areas are contributing significantly to all CBDRM, however, their role and contribution are not properly recognized. Gender stereotype strongly influence the work allocation for women, which in many cases are not proportional to their actual contribution. For instance, the percentage of women in rescue teams is very limited while in reality there are rescue team consisted of all women (for example in 3 communes in Tu Mo Rong district of Kon Tum province). Capability, demands and vulnerability of women are not reflected properly, therefore affecting the design of DRR solutions. However, recent developments in law making and requirement of gender mainstreaming as an integral part in donor-supported projects are key factor to increase participation of women in DRR&CCA. Taking into consideration the importance of enhancing women's role in CBDRM&CCA, it is recommended that:

(1) Gender equality as a cross cutting principle has been stipulated in Law on Natural Disaster Prevention and Control and needs to be concretized in under

law documents with gender criteria and indices. Make sure that gender disaggregated data is properly collected from the very grassroots levels to national level. CBDRR&CCA plan that do not have gender objectives and gender responsive activities should not be approved by local authorities.

(2) Interventions through whole project/program cycle from planning, budgeting, assessing to learning should be gender sensitive. Substantial participation and leadership of women and vulnerable groups (such as ethnic minority in remote areas, disabled people) is necessary for achieving Sustainable Development Goal.

(3) Focus more on gender capacity building for staffs in charge of data collection and analysis, gender mainstreaming in CBDRR&CCA. Capacity building for Vietnam Women's Union staffs at all levels on CBDRM&CCA

(4) Capacity building for Vietnam Women's Union staffs who is member of Committee for Natural Disaster Prevention and Control at all levels. Organize dialogues on gender sensitive intervention to identify and implement DRR&CCA intervention that empower both men and women.

(5) Improving and developing communication materials that challenge gender stereotypes in DRR&CCA, highlight role of women as a way to increase the women's participation in planning and technical assistance.

(6) Supporting women-led initiatives on improving community resilience. Replicating effective CBDRR&CCA model that contribute to gender equality in community in general and disaster prevention in particular.

## References

Department of Agriculture and Rural Development of Thanh Hoa province - GCF provincial project management committee. (2019). *Report number 150/BC-BQLDA.GCF on result of project Improving the resilience of vulnerable coastal communities to climate change related impacts in Viet Nam in 2019.*

Green Climate Fund, Viet Nam. (2018). Improving the resilience of vulnerable coastal communities to climate change related impacts in Viet Nam - Brief Gender Assessment assessed. <https://www.greenclimate.fund/sites/default/files/document/gender-assessment-fp013-undp-vietnam.pdf>.

Ireson-Doolittle Carol and Ireson Randal. (1999). "Cultivating the forest: gendered land use among the Tay in Northern Viet Nam". In Tinker I. and Summerfield

G. *Women's rights to house and land China, Laos, Viet Nam*. Lynne Rienner Publisher, Boulder, Colorado.

MARD & UNDP. (2015). *CBDRM Manual*.

UNDP. (2018). *Gender update report and gender action plan in GCF project - consultants' report*.

United Nations (UNDP), Oxfam. (2011). *Policy Brief Gender equality in climate change adaptation and disaster risk reduction in Vietnam*. <https://asiapacific.unwomen.org/-/media/field%20office%20eseasia/docs/publications/2015/05/policy%20brief%20on%20gender%20cca%20%20drr.pdf?la=en&vs=616>.

UNICEF, Prudential, MARD. (2018). *Policy Brief - Capacity Gap Assessment of the Central and Provincial Committees for Natural Disaster Prevention and Control system, and the Viet Nam Disaster Management Authority, with a child lens*.

United Nations in Vietnam (2015), *Policy Brief: Gender equality in climate change adaptation and disaster in Viet Nam*.

Vietnam Women's Union, Oxfam Hongkong. (2010). *The review of Gender mainstreaming in National strategy of natural disaster prevention and control by 2020 and National Plan of CCA in Vietnam*.

Vietnam Women's Union, UN Women. (2011). *Knowledge - Attitude - Practices survey on DRR & CCA in 2 provinces of Phu Yen and Binh Dinh (in framework of UNWomen supported project "enhancing women capacity in climate change adaptation in 2011)*.

Vu Minh Hai. (2004). *A study of gender relations in disaster management in three disaster prone areas of Vietnam*, Report to VNRC and IFRC in June 2004.

World Bank. (2011). *Vietnam Country Gender Assessment (p 72)*, <https://documents1.worldbank.org/curated/en/894421468321306582/pdf/655010WP0P12270essment-0Eng-0Final.pdf>.