# Climate justice approaches and effectiveness of flood response interventions on women in Chikwawa District, Malawi

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#### **Abstract**

Climate change that is translated to floods has caused enormous impacts on women. With focus on the 2015 floods, the study's objective was to analyse preand post-flood response interventions from different stakeholders on women where the effectiveness of the use of Climate Justice Approach in interventions to enhance women's resilience during 2015 floods in Malawi was also examined. The study had household interviews, focus group discussions (15 men and 15 women) and key informant interviews (2 experts). Through climate justice approach, the study adopted a qualitative method. However, where necessary some quantitative data was provided. Qualitative data was analysed through Thematic Content Analysis while quantitative through SPSS. The results indicated that women received response, recovery and resilience interventions. Though women received the response interventions (response, recovery and resilience) the study found that they did not fully benefit culture and tradition, rigid gender roles and stereotypes, increased workload and Gender Based Violence. However, the interventions that had climate justice lens proved to enhance women's resilience than the one without climate justice lens.

## Key words: floods, women, response interventions, climate justice, effectiveness.

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#### Introduction

## Climate change and development challenges

Globally, climate change and weather variability risks have received attention by policy and decision makers (Alam, Bhatia and Mawby, 2015). Frequency and intensity of floods, prolonged dry spells increased affecting the livelihoods of rural and urban communities (Bukhari and Rizvi, 2015).

Communities all over the world are impacted with climate change related risks in one way or the other (UNFCC, 1992). Floods for example, have greatly contributed to disturbances and system failures in agriculture, health and education and other sectors (Amelaw and Simalenga, 2015).

Studies have shown that climate change related risks especially floods have a huge impact on poor communities especially among women and other vulnerable groups (Bukhari and Rizvi, 2015; Davis, Roper and Miniszewski, 2015). These have affected property and other investments and have reduced crop and livestock production in many developing countries (World Bank, 2019). Whilst floods help in recharging ground water and increasing soil nutrients (Alemaw & Simalenga, 2015), wherever they occur they have caused a number of social and economic challenges (Bukhari & Rizvi, 2015), such as lack of food, shelter and other basic needs (Davis et al, 2015).

Developing countries face high risks of vulnerability during floods (Mac Gregor, 2010) due to several factors including poverty, structural reforms and poor investment to prevent floods and other natural hazards (Mac Gregor, 2010; Kapalamula, 2016). It is now recognised that women, faces a triple burden as about 80% of them live in poverty (Yavinisky, 2016), depend on agriculture with traditional methods and have a lot of workload during floods (Alam,

et al., 2015). Since floods also hasten migration and displacement, women in particular are subjected to abuse and deprivation Bukhari and Rizvi, 2015 IBA, 2014 Perkins 2014. Studies (see Boakye, 2015), have revealed that women experience high poverty, loss of land, life, culture and loss of identity during floods Alemaw and Simalenga 2015 Bunn and Arthington 2002.

Climate change related risks especially floods have been witnessed in Malawi for years where agriculture is predominantly rainfed and practiced by 76% of its population (National Statistics, 2017) of which more than half are women. Flooding in 2014/15 and Cyclone Idai in 2019 caused more damaged to crops, livestock, property with direct impact on women (ACAPS, 2019; UNICEF, 2015).

For example, 2019 floods affected 15 districts where about 638,000 people were affected and over 50% were women (GoM, 2015b). A Government of Malawi report indicated that 174,000 people were displaced, resulting in 79 deaths leaving 153 people missing where the floods affected 63,976 hectares of land by February 2015 (GoM, 2015b).

Floods in Malawi have more impact in the Nsanje and Chikwawa districts, known as Lower Shire due to their geographical location and flow of major rivers to Zambezi River. As such two main rivers (Shire and Ruo) have been flooding annually due to upland anthropogenic activities that have resulted in land degradation and siltation of the rivers (GoM, 2006).

Over years, Chikwawa district, situated in the lower part of the country has been one of the most affected districts in Malawi. Whilst the number of people affected have been fluctuating, it is clear that recently more people are being affected. For example, in 2014/15 reports indicate that 434,648 people were affected compared to 523, 10,000 and 22,400 people in 2008, 2006 and 2001

respectively (UNICEF, 2008 & 2015; DFIFD, 2016).

Report further show that education, health and agriculture sectors as well as the livelihoods of women are greatly affected by floods (GoM, 2006; GoM, 2017). For example, in the year 2015 about 4847 households were displaced and relocated in the 7 camps instituted where over 60% of the population were women and girls (IRFC, 2018). In addition, bearing that about 80% of agriculture activities in the country are done by women (Smith, 2015) floods further affect their livelihoods and resilience. Almost one third of the farms were washed away thereby threatening food security. Furthermore, about 71% of education facilities were affected with in the district which disturbed the education system and saw a number of girls dropping school in the district (GoM, 2015a). Women also has difficulties in accessing healthy services such as family planning and under-five clinics due to the floods (Tcheleni, 2015; Tsabola, 2017).

Due to these challenges, the government of Malawi and several stakeholders have been implementing interventions to enhance resilience among communities in Lower Shire (Mhango, 2017; Tsabola, 2017).

Scholars have advanced several concepts and theories to address climate change related issues. For example, different theories and concepts have been applied in dealing with the climate change issues at global, national, community and individual levels such as Climate Change Resilience and Climate Smart Agriculture. For example Climate Smart Agriculture as one of the concepts, aims at improving agricultural productivity and food security in a sustainable manner as well as enhancing farmers' resilience and adaptation to the changing climate (World Bank, 2015).

Climate justice for instance, is one of the concepts that have been advocated for the climate change hazard victims in helping them to

realise their rights and promoting resilience (Robinson, 2013). This study, has referred the Climate Justice concept as "the fair treatment of all people and freedom from discrimination with the creation of policies and projects that address climate change and the systems that create climate change and perpetuate discrimination" RIA, 2011 (Sam, 2013;).

Emerged as a developmental issue, experts applied Climate Justice in different countries such as United Kingdom, United States of America, Bolivia and South Africa to address climate change issues (Robinson, 2013). These countries saw positive results as the rights of women among others were considered (Sam, 2013; Elliot and Cook, 2016). The positive results are constructed on the premise that Climate Justice is built on principles of gender equality and equity; human rights; transparency, accountable and participatory decision making; as well as social control (Grosse, 2019; Elliot and Cook, 2016;RIA 2011; Robinson 2013). These principles build its practice, to address the burdens of disasters, shortages of resources to the vulnerable and the inequalities between men and women.

Apart from the theories and concepts, other stakeholders also responded to the victims of climate change with interventions that addresses food security (DFID, 2016; Bello, 2017), health and sanitation (GOAL, 2015; Tsabola, 2017; Mhango, 2017), education (DFID, 2016), environmental conservation (Smith 2015, Mhango, 2017).

These interventions have covered the response, recovery and resilience aspects (Mhango, 2017; Tsabola, 2017). Following the governments and the stakeholder's policies, the flood response interventions have had different impacts on women (Tsabola, 2017). Nevertheless, little is known in the consideration of Climate Justice concept in the interventions given to the victims where women seem to be affected. There is a knowledge gap in whether policies are frames based on Climate Justice lens and whether this

concept has promoted human rights, equality and equity during flood response programming in the study area.

#### **Problem statement**

Although different organisations have implemented different interventions in the affected areas, it was observed that women were still facing challenges. This study then sought to investigate if Climate Justice Approaches were applied by these organisations and if yes, what factors contributed to the ineffectiveness. In addition, although several theories and concepts have been applied to make sure that women are given the required attention, very little has been tested for those impacted by climate change related challenges.

## **Objective**

## Main objective

To analyse pre- and post- flood response interventions on women among different stakeholders in relation to Climate Change Justice.

## **Specific objective**

To analyse the extent to which Climate Justice approach was applied in response interventions in the flood affected areas of Chikwawa district

To assess factors affecting the effectiveness of flood response interventions among women in Chikwawa district

With this introduction and background, the paper then provides methods and approaches taken during the study; results and discussion whilst conclusions are presented in the last part aligned to theory, policy and practice.

#### Material and methods

This section discusses the materials and methods used in the study.

## Study sites

The study was conducted in Chikwawa district which is located between latitude 16.1667°S and longitude 34.7500°E (Wiley, 2016), and has a population of about 565,684 people whereby 276, 890 are men and 287,794 are women NSO, 2018. The district is characterized by flat lands along the Shire River which falls under the Great Rift ValleyGoM,2006.

The study was conducted in Traditional Authorities T/As Ndakwera and Lundu covering Siyamphanje and Mphampha village respectively. These villages were the worst hit in 2015 floods Smith 2015 UNICEF 2015, and received response interventions from different stakeholders (Mhango, 2017; Tsabola, 2017; UNICEF, 2015).

Two prominent organizations working in the villages were Troccaire/CADECCOM covering Siyamphanje village and uses Climate Justice Approaches whilst Evangelical Association of Malawi (EAM) was working in Mphampha village and did not use Climate Justice Approach. Apart from the relief interventions, during the 2015 floods the organizations also provided sanitation and agriculture interventions to the victims (Mhango, 2017). The organizations based on their policies, they mainly focused on men and women leaving out children and the youth.

## Design

The work used mostly qualitative approach, participatory focus group discussions were employed. These were used because of their ability to tackle attitudes, perceptions and experiences. In some instances where quantifiable results were needed, some quantitative approach through household interviews were applied.

The study analysed the extent to which Climate Justice Concept was applied in response interventions in the flood affected areas of Chikwawa district. In this, the study compared the interventions given by various stakeholders in relation to the Climate Justice principles. Furthermore, the study assessed factors that affected the effectiveness of flood response interventions among women in the district. This was done through the analysis of the soci0-cultural environment that women victims found themselves during the floods.

The above methods were further strengthened based on the Flood Response Frameworks as suggested by Hyogo Framework (Hyogo, 2005) and Post- Disaster Needs Assessment (PDNA) framework (GoM, 2015a). Key issues in the frameworks include response, recovery and resilience. Specifically, Hyogo Framework emphasizes on the "systematic incorporation of risk reduction approaches into the design and implementation of emergency preparedness, response and recovery programmes in the reconstruction of affected communities" Hyogo 2005:.

Conversely, PDNA looks at the needs, vulnerability and recovery of disaster victims GoM, 2015a. In the PDNA, the study only focused on human impact assessment using the Human Recovery Needs Assessment (HRNA) technique, by assessing concerns and priorities of the victims as regards in building their resilience (GoM, 2015a; 2015b). Both Hyogo framework and PDNA address the issues of vulnerability and human rights which are also directly linked to Climate Justice Approaches.

#### Data collection

Data was collected from a sample of 30, where 30 households were interviewed. In addition, on the same sample, 4 focus group discussions (8 women and 7 men per village) and 2 key informant interviews were also conducted. The participants were purposefully and jointly identified with the Non-governmental organizations (NGOs) working in the villages. All the participants were selected based on a criteria of working with the NGOs from the time the organization started working in the village up to the time the data was collected.

Household interviews helped to understand individual's daily experience on the floods and the support given. The focus group discussions helped to get collective response on the given support while the key informant interviews that involved the village heads helped the study to have a broad picture of the support.

All the interview guides (focus group discussion guide, key informant guide and questionnaire) were developed in English language and then later translated in Chichewa language which is the national language in Malawi. Apart from the 2 village heads, all beneficiaries were subjected to the focus group discussions and household questionnaires. Demographic data was collected through a questionnaire while all the interviews were recorded digitally and verbatically transcribed, then translated into English. Demographic data assisted the study to understand participants' experience based on their backgrounds and how the interventions have helped them.

The study ensured proper procedure in informing appropriate authorities. There was a clearance from Lilongwe University of Agriculture and Natural Resources as well as access letter from the police and head office of the key organizations working with to collect the data, where officials from the organizations were also

present during data collection.

The study also ensured the safety and privacy of the participants by treating their opinions private and only accessible to the study. Their identities were also protected. In addition, the respondents, participated on a voluntary basis as they gave consents to participate. This was achieved by signing or thumb printing the consent forms to participate apart from accepting verbally. All participants were treated with dignity and integrity.

## Data Analysis

The pre and post flood data was analysed in different ways. Firstly, the household interviews on the semi-structured questionnaire were analysed through SPSS. The key informant interviews and focus group discussions were analysed through Thematic Content Analysis (TCA). The data was coded using different colours based on the emerging themes. Minor themes were then drawn from the coded data which informed the emergence of broader themes.

#### Results and discussion `

This section presents the findings and the discussions. It has first presented the demographic characteristics, an overview of the response interventions and lastly the factors affecting the flood response intervention's effectiveness on women in reference to Climate Change approach.

## Demographic characteristics

The demographic information placed a precedent for understanding the participants' literacy levels, household type, age, marital status and source of income (See Table 1). The characteristics helped to reveal how vulnerable the women were to

the floods.

Table 1: household type, source of income and literacy level

Age		Household		Source	on	Literacy level	
		type		income			
20-	33%	MHH	87%	Piece	46%	Primary	53%
30				works			
31-	33%			Small	17%	Secondary	23%
40				business			
41-	17%	FHH	13%	Farming	27%	Tertiary	7%
50							
51 =	17%			Employed	10%	Non	17%

Of the 30 participants that took part in the household interviews, 33% were between ages 20-30 and 31-40 respectively, while 17% were between ages 41-50 and above 50 respectively. A bigger percentage (87%) were coming from male headed households while only 13% were coming from female headed households. In terms of sources of income, 46% of the participants depended on piece works while 17% depended on small scale businesses while 27% of the participants depended on farming as a source of income and only 10% are employed. Lastly, a larger part (53%) of the participants reached primary school level, 23% of the participants reached secondary school level while 7% reached tertiary level and

17% of the participants were illiterate.

The participants were also asked about their marital status, and family size. Table 2 below summarizes the information.

Table 2: marital status and family size

Marital status		Family size			
Single	3%	=4	23%		
Married	87%	5-7	60%		
widowed	3%	=8	17%		
Divorced	7%				

Most of the participants (87%) were married. About 7% of the participants were divorced and 3% were single and widowed respectively. In terms of family size, a larger percentage (60%) had between 5 to 7 members per household. 23% of the participants had less than 4 members per household while 17% had more than 8 members.

## An overview of the flood response interventions

The flood response interventions given were categorised into three namely; response, recovery and resilience interventions.

## 3.2.1 Response interventions

From focus groups and household interviews, when participants were asked about the response interventions that the flood victims received, a number of responses emerged. The responses covered

the ones soon after the floods, a week after the floods and more than a week after the floods. Interventions were categorized as the following: provision of food, rescuing from the floods and farm inputs as well as sanitation utensils, infrastructure and environmental restoration.

Apart from the two organisations case studies, the study revealed that there were other Six stakeholders who provided support in both villages including the following: Department of Disaster and Management Affairs (DoDMA), Forest Committee, Village Development Committee (VDC), Village Civil Protection Committee (VCPC) and World Vision International.

The study has revealed that the first response was to protect lives of people as such most of the stakeholders emphasised rescuing people from the waters. This was followed by provision of food which was for at least a month after the floods rather than soon after the floods.

On average, the overall responses were good on sanitation utensils and infrastructures. The response programming further include provision of farm inputs such as maize and beans seeds, treadle pumps and sweet potatoes to support agriculture. Environmental restoration was among the interventions supported after a month of the floods as stakeholders provided seedlings to the villages. Nevertheless, Mphampha Village had more hand-outs interventions while Siyamphanje village had more capacity building interventions.

## 3.2.2 Recovery interventions

The questions the study posed in this section aimed at understanding how women recovered from floods. This also helped to understand how women were empowered and had their rights were respected. Participants were asked on how easy it was to access the basic needs at household level based on the fact that 87% of the participants were married as indicated in Table 2. The period after the floods in this section was defined as six to eight weeks after the floods. The following table summarizes the findings.

Table 3: % response on efforts access to basic needs

Village name	Access to other basic needs								
	Me	n			Wom	ien			
	Very easy	Fair	Difficult	Very	difficult Very easy	Fair	Difficult	Very	difficult
Mphampha	6	31	31	31	6	25	38	31	
Siyamphanje	14	21	50	14	14	14	57	14	
Overall (%)	10	27	40	23	10	20	47	23	

In Mphampha village, it was established that 31% of men had difficulties in accessing the basic needs while 38% of women had difficulties on the same. On the other hand, in Siyamphanje village the findings show that 50% of men had difficulties while 57% of women had difficulties.

In both villages it was observed that women were still disadvantaged because they had difficulties in finding other basic needs despite the response interventions. This emanates from the high dependency of women on men. This also shows that women were not fully empowered as per Longwe's model (1991). In

addition, based on Robinson's (2013) work, women mostly remain vulnerable to floods. Its impacts and issues of accountable, transparency and participatory decision making should not therefore be undermined.

On the same, it was also noted that in Mphampha village 31% of men find it fair against 25% of women to access the basic needs. In Siyamphanje village 21% of men find it fair against 14% of women.

This still shows that women are the victims of floods. Women also had difficulties to recover from flood due to the same dependency syndrome. The results agree with other scholars such as Mchepa (2016) who examined the impacts of floods on women and girls in Chikwawa and Nsanje districts. He found out that women and girls are more burdened and are the greatest victims of floods due to high dependency on husbands' decision making that also promotes inequalities in turn. This therefore indicates some gaps in policy formulation and stakeholder interventions approaches.

#### **Resilience interventions**

Participants were also asked if they were able to bounce back to the normal situation three months after the floods. The study looked at proximity variables that are directly or indirectly linked to health status at household's level as well as economic status of women. Using the same household interviews and focus group discussions the study used the following variables: distance to the hospital, availability of toilets, access to medicine and availability of portable water and other sanitation utensils. In economic activities the research explored if they were able to do income generating activities or not. Table 4 summarizes the findings.

Table 4: health status and economic independence

Villagename	Gender	Resilience indicators		1	
Mphampha		<b>Health status</b>		<b>Economic independence</b>	
		Poor	Better	Able	Notable
	Men	43%	57%	100%	0
	Women	22%	78%	78%	22%
Siyamphanje	Men	29%	71%	86%	14%
	Women	14%	86%	100%	0

#### Health status

The results indicates that women in both villages were able to access hospital services, sanitation items such as toilets, portable water and other sanitation utensils after the response and recovery intervention by the organizations. This implies that the organizations had an impact on women in terms of their resilience as they embraced gender equality which is one of the critical principle for Climate Justice.

Apart from the application of gender equality approach in the interventions, in Mphampha village the better health status can be attributed to the special interventions for women such as women sanitary pads, mosquito nets and soya. Though Siyamphanje Village did not have special intervention for women, the boost can be attributed to climate justice approaches in their interventions. Based on Maslow's basic needs approach (Neher 1991) and Longwe's (1991) empowerment model, women were empowered by meeting some of their basic needs three months after the floods by the organizations. This however, turned to improve their health

status despite challenges such as lack of money and long distances.

#### **Economic status**

After being asked if they were able to do income generating activities three months after the floods, bearing in mind that in response and recovery men had a better stand in finances than women, the results show that 100% of men were able to find an income generating activity such as piecework and small scale business while 78% of women were also engaged in income generating activities in Mphampha village. In Siyamphanje village 86% of men were economically independent while 100% of women were economically independent.

The findings means that more men in Mphampha Village were able to engage in economic activities than women. The activities ranged from farming, small scale business, piecework in people's fields and at Illovo and Lengwe National Park. The businesses ranged from tuck-shop, farm produce to bicycle taxis. In contrast, women's activities included village savings banks and selling snacks.

"Through Illovo we were doing piecework as well as farming in the farms of people who had money. We also do irrigation and small-scale business such as Kabaza (bicycle taxi)" (Mphampha male participant)

Looking at the type of businesses men and women engaged themselves, already gives an impression that men were the ones making more money than women. This is because the activities that men were doing fetch more money than those by women. This can be attributed to the issues of culture and assumes responsibilities as observed by other scholars (Yavinisky 2016).

Conversely, in Siyamphanje Village more women managed to engage in economic activities. The high number of women in economic activities signifies that they were resilient to floods. Since climate justice promotes resilience, it is also connected to autonomy and resourcefulness. Economic independence brings about autonomy and resourcefulness to human beings.

# Factors affecting flood response interventions' effectiveness among women

Despite a number of stakeholders responded to the floods, women still remained vulnerable. Though roccaire/CADECCOM had some climate justice interventions, the following factors also affected flood response interventions effectiveness on women: culture and tradition; rigid gender roles and gender stereotypes; increased workload; and Gender Based Violence.

#### Culture and tradition

Chikwawa District is a patrilineal society and people are deeply rooted in traditions and culture. Women are seen as being lesser significant or being supporting beings. Other scholars defined Patriarchy as the male domination in both public and private spheres (Sultana, 2011). In villages, it was noted that men were regarded as the heads of the families. These sentiments have been observed by some of the participants as one man said:

"The husband since is the head of the family, he is the driver of the house." (Siyamphanje Female participant).

These phenomena place men at an advantageous level over women. Here, man is the driver and the leader where he is to be in the first position in most of the activities. The society has made to embrace the notion of a man as a leader. This also entails that the man becomes an all-rounder and involves decision making. When the victims received response interventions, male members had a final say in items utilization. This ideology is also appreciated as one man had to say this:

"The man is the head of the family; therefore he must control everything at home. He is the leader, the driver. It's by culture." (Male participant Mphampha village)

The same culture and tradition see men being vested with power and control on valuable resources. When they were asked on who has control on a number of issues, it was noted that women control simple things such as water and kitchen utensils while valuable resources such as money, land and assets such as animals, bicycles and radios are controlled by men. One man had to say this:

"Men control money mostly because it is the man who goes to find money...Even if the money is found by the woman, she, in respect still gives it to the man... The woman has to be respectful, the man's job is to love." (Male participant Siyamphanje village)

Another participant also shared the same sentiments from the other village as follows:

"Men controls money. They are the ones who bring the money. You can't argue with them when they are the ones working in the estates." (Female participant, Mphampha village).

The findings also reveal that women mostly are not economically independent: they depend on their husbands to have most of their basic needs. Since men have various ways of finding money they are better off than women. Women have limited mobility due to the triple roles of production, reproduction and family (Yavinisky, 2016). This has also added to their subordination and violation of their rights which is contrary to the climate justice principles. Other scholars have linked men's control and patriarchy to material and economic being. Sultan (2011:5) quotes Hartman (1981), who argues that patriarchy deals with "a set of relations which has a

material base and in which there are hierarchical relations between men and solidarity among them, which in turn enable them to dominate women". Other scholars have also explained that being a household head also assumes a lot of powers (Haralambos and Holborn, 1991). Based on this notion, it is vivid that women had less control and had their rights violated as well as made few decisions at household level.

The material base of men's dominion also has links in controlling women's labour power and resources. This can be seen through the differences in understanding of men. For example the chickens that women received were special interventions only for women as one of the stakeholders as indicated below:

"We deliberately focused on women in some interventions because our culture favours males. So, the Black Australorp project (Chickens) were for women only." (One of the officers)

In contrast, with the same male dominated values, the men did not accept the chicken interventions as to be for women as intended by the organization, they however, went ahead to control them as said one on the participants:

"EAM provided us with chickens which we are rearing in our houses and we make sure our wives are feeding them" (Male participant Mphampha village).

The same culture was also vivid in women's sexual and reproductive health. Women were not able to control their sexuality in terms of decision on the number of children. One of the women lamented:

"Men decide on the number of children to have. The woman

can tell the man that we should stop or we should just have one more child. But there are some men who do not want to stop because they want to have a bigger family." (Female participant Mphampha village)

Lack of women's control of sexuality results to large families, overpopulation and compromised women's health status. This affected women's productivity in agriculture and community work. In addition, due to overpopulation, there was much competition on labour as male workers were mostly preferred in the factories over female workers. This agrees with the work of other scholars that claims that patriarchy and male dominance is based upon male violence and control of women's sexuality (Bryson 2003; Hannam 2007). Other scholars have also argued that culture oppress women in both private and public space (Freedman 2002).

## Rigid gender roles and gender stereotypes

Rigid gender roles also created a challenging atmosphere for women to enjoy the flood response interventions. This is due to their confinement in the private space. The table below presents the gender division of labour at the household level in the area

From the findings, women have been assigned a number of roles to perform on daily basis as opposed to men. For example, men only sweep outside on daily basis while women do a number of chores on daily basis such as cooking, feeding animals and caring the family. This sees women to spend much time on working. The confinement in the private space prevents them to focus on developmental activities. Men are at an advantageous place because they are exposed to the public space where they are able to do a number of income generating activities. One woman had to say this:

"Most chores are done by women, despite the gender talk.

Table 1: Gender division of labour

Number	Men's roles	Frequency	Women's roles	Frequency
1	Cutting wood	Weekly	Fetching water	Daily
2	Building toilets	Occasionally	Fetching	Daily
	and houses		firewood	
3	Digging the pit	Occasionally	Caring children	Daily
			and the husband	
4	Sweeping	Daily	Caring the sick	Occasionally
	outside the			
	house			
5	None	None	Washing	Weekly
6	None	None	Cooking	Daily
7	None	None	Cleaning the	Daily
			house	
8	None	None	Farming	Daily when in season
9	None	None	Feeding the	Daily
			animals	

When we ask men to help out they deny because their friend mocks them that they have been given love potion." (Female participant, Mphampha village)

The roles have been rigidly framed from the cultures and traditions as it shapes perceptions and stereotypes. Women are being burdened because some the men fear that they will be seen as weak or being fed love portion if they help their wives with chores. In this case, men are just worried about protecting their image disregarding women's burdens. One man also had this to say:

"There are some things that women take care of care of, such as food...women look after the kitchen... In addition, if visitors come to the house and find an unclean cup, they won't ask the man, but the woman." (Male participant Siyamphanje).

Since gender roles and relations are culturally defined, culture limits women's personal abilities and choices. This entails that there is limited participation in flood response interventions that aims at sustaining their livelihoods such as irrigation projects, VSLs and energy saving charcoal burners as they spend much time in unpaid work. This agrees with work of others that domestic unpaid labour promotes wife's economic dependence upon her husband (Bryson 2003). Radical feminist have also argued that women's unpaid work promotes oppression and prevents them from productive work (Delphy and Leornard 1992).

#### Increased workload

Rigid gender roles have created burdens on women and increased workload. When the participants were asked about the type of work they were doing after the floods to understand women's workload, it was noted that women were doing most of the heavy work during and after the floods. The results show that 67% of men in Mphampha Village were doing heavy work while 33% light work. On the other hand, 90% of women were doing heavy work while 10% do light work. In Siyamphanje Village, 74%, of men were doing heavy work while 26% do light work. On the other hand, 86% of women were doing heavy work while 14% do light work. The work included farming, home care, fetching water and firewood and businesses

The results implies that women were still doing heavy work in both villages despite different interventions. This can also be

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attributed to issues of culture where women still take care of the household. In addition, low levels of education among women, made more men to be employed in the factories. Another reason is the shifting of workload to women as some men travelled away to look for greener pasture. This increased the workload as many women did not had the capacity to hire people to do the work left by men.

In still investigating if women were resilient to floods, participants were also asked the number of hours they were working. It was found out that 50% of men in Mphampha Village work for 7 to 12 hours while 6% work for more than 12 hours. On the other hand, 44% of the women in the village work for 7 to 12 hours while 38% work for more than 12 hours. In contrast in Siyamphanje Village, 63% of men work for less than 6 hours while 6% work for more than 12 hours. On the other hand, 64% of women work for 7 to 12 hours while 14% work for more than 12 hours.

This means that women in both villages were still working for more than 12 hours as compared to men. This can also be attributed to the reasons explain above on type of work for men and women. These findings are consistent with the work by some scholars such as Drolet, et al., 2015 where they take resilience to be linked to body performance. This means that those who were able to work less with light work and few hours were able to bounce back and return to normal livelihoods. As a result, they had a better health status as well as time to engage in economic activities and participate in the community activities.

## **Gender Based Violence (GBV)**

Gender based violence (GBV) emerged as another factor limiting effectiveness of flood response interventions on women in the area. It was noted that when the organizations distributed the items to the households, some men were grabbing away items

and sell. This rendered women more vulnerable. One of the participants explained as follows:

"Some husbands steal farm inputs given to sell at home and use the money for beer". (Male participant, Mphampha village)

The organizations, as part of flood response package, were training women in different skills including business skills. It was noted that when they started small scale business, they did not go far with them as some men took away the money. One woman had this to say:

"When you tell men about the money you have from the business, they demand to keep it. The same night, they use the money to drink beer or even to find other women. So as the woman, this gives you a lesson. Sometimes you just prefer to end the business altogether." (Female participant, Siyamphanje village).

#### Another woman also shared the same sentiments:

"With the introduction of Village banks if a woman has obtained a loan from the bank the man takes all the monies and spend it on alcohol if you refuse to give him the money he beats you up mercilessly." (Female participant Mphampha village).

In other instances it was noted that women were being beaten for asking for food. Sometimes the husbands as the head of the families were the ones receiving the food items for the households as the women were taking care of other domestic chores. Because of different plans that the husband had on the received items wife battling was inevitable. One woman had this

to say:

"For example during the floods, when you are trying to explain to the husband that there is no food which the husband happened to receive or you know that he has money, instead of him helping he starts beating you up." (Female participant Mphampha village).

GBV was also vivid in issues of food consumption. For example, despite women being the ones preparing the food they were eating later after the husband and in small quantities. This was alluded to the fact that it was mostly the man who was working to find the money for buying food therefore he had to have a special portion. One of the participants explains:

"You make sure the man gets enough food so that he can work the next day while you as a woman and the kids share the little food left" (Siyamphanje female participant).

From the findings, economic, physical and psychological forms of GBV are great. These forms of violence place a woman under the subordinate position where her autonomy is compromised. This is so because GBV is the greatest expression of unequal gender relations in society: first it is a violation of human rights, a developmental issue and a global health issue that crosscuts all aspects of life. This also in consistency with findings from other scholars that physical and psychological violence, wears down a woman's self-esteem, preventing her ability to defend herself as well as taking action against her abuser (Izumi 2007). Feminist theorists have also argued that domestic violence always reflect unequal power relations between men and women in the society and the victims are always women (Mellish et al, 2015: Ram 1997: Davis and Hagen 1992).

#### Conclusion

The study has noted that climate change has enormous impacts on the vulnerable and specifically women. The 2015 floods in Chikwawa district saw many women being vulnerable. Through different approaches, some organisations used Climate Justice Approaches when responding to flood victims while others did not. Flood victims in Mphampha and Siyamphanje villages received response, recovery and resilience interventions to help them during and after the floods. In some instances there were special interventions for women. Troccaire/ CADECCOM had climate justice approaches when providing interventions and women's lives seemed to improve.

Despite women's lives being improved through the village savings groups, capacity building and multipurpose interventions, women did not fully benefit from interventions due to factors such as culture and tradition, gender roles and stereotypes, increased workload and GBV.

The results from this study, reveal that women in Malawi affected by floods are supported by different organisations but there are other factors that still contribute to their vulnerability typical example of Southern Africa. Many stakeholders have not embraced the notion of Climate Justice approach despite proving to be addressing critical needs of women affected by climate related disasters. At the current level, the concept of Climate Justice is not fully embraced due to limited awareness and scholarly contributed globally.

Given the frequency and intensity rate of floods and other climate related challenges and also looking at other challenges such as population growth and environmental degradation, there is need to advance the concept of Climate Justice especially from policy programming.

It can also be concluded that interventions are mostly geared to save and protect lives of people. This calls for proper local level structures that can provide this support especially that NGOs tend to come late after the floods. The local structures that played a great role soon after floods needs to be capacitated including proper training to address women needs.

Flood response mechanism lack official recognition of Climate Justice approach despite some principles being applied unknowingly. Lack of this recognition by officials have also allowed many stakeholders to provide interventions without a critical analysis of women needs. This can increased vulnerability of women. This also has further allowed interventions to ignore children and the youth who are also among vulnerable groups.

Policy should not necessarily emphasise on increasing resilience through Climate Justice approach but should start with capacitating local structures to include some of the Climate Justice approaches in their interventions. In particular, policy should address the capacity gaps among village level structures so that responses are inclusive enough to include human rights, dignity of women, treatment of all people and freedom from discrimination.

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