

# **Faith Engagement in Climate Adaptation in Low and Middle Income Countries: A Landscape Analysis Focused on CCIH Member Perspectives and Initiatives**

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## **Executive Summary**

### **Introduction**

The WHO recently recognized climate change as the “single biggest health threat facing humanity”. This makes measures such as climate adaptation very crucial since reversing the phenomena is not possible, but mitigating its effects and preparing for the impact is. Climate change has the largest negative effects on those in low- and middle-income countries, increasing existing inequities and injustices. Many faith-based organizations (FBOs) are experiencing this first hand in their communities and programs and believe that action is essential. Adaptation measures are being implemented in many countries but scale up is essential to the health and flourishing of humankind. The purpose of this study is for Christian Connections for International Health (CCIH) to understand how its organizational members are addressing climate adaptation and understand the knowledge and capacity gaps in order to initiate engagement in this area.

### **Methods**

This effort is a mixed method study, which includes a literature review, a quantitative survey and qualitative interviews. The study area focuses on Africa, Asia and Latin America, although some of the grey literature covered US based FBOs.

### **Results**

The literature review, survey and key informant interviews revealed that some FBOs were already implementing some adaptation programs such as food security programs and tree planting projects to help with extreme heat waves. Others are becoming more climate minded, leading to assessment in areas including how to help vulnerable populations such as people with disabilities adapting to changing environments. Many FBOs are evaluating response options to determine how they can get involved. There is high motivation from FBOs to implement climate adaptation programs, however system preparedness is low.

### **Recommendations**

Recommendations from organizations covered in this study were divided into two groups 1) Recommendations to CCIH and 2) Recommendations to other FBOs. CCIH members recommended that CCIH share intentional communication about the intersection of climate change with health, initiate south-to-south climate learning sessions, and facilitate funding opportunities for FBOs. Key recommendations to other FBOs include a call to action for more faith partners to get involved, sharing of the impact of climate change with communities who are less affected, especially high income communities through climate witnessing, and for FBOs already progressing in this area to network with others for knowledge sharing.

## Introduction

According to the WHO, climate change will be responsible for 250,000 deaths per year from 2030 to 2050.<sup>1</sup> These projected deaths will occur from an increase in malnutrition, malaria, diarrheal diseases and heat stress alone. Rising temperatures increases the risk of infectious diseases as was observed with malaria reaching the high inland areas of Ethiopia and Colombia in the last decade.<sup>2</sup> The link between climate change and human health keeps getting stronger as the evidence continues to unfold.<sup>3</sup> Wildfires, extreme heat and droughts, stronger hurricanes, melting ice, sea level rise and changes in precipitation also take a toll on socioeconomic activities which affects all other areas of human existence.<sup>4-6</sup>

The Intergovernmental Panel on Climate Change (IPCC) has defined climate change as a change in climate which is verifiable by changes in the mean and/or variability of its properties which persists for decades or longer.<sup>7</sup> Despite the evidence that human activities are now the primary cause of climate change, there are still politically fueled controversies around the subject.<sup>8</sup> Climate change is a global threat which means all countries are being affected, although the degree of impact varies greatly by region.

Low- and middle-income countries (LMICs) will experience the worst outcomes from climate change even though these regions contribute the least to its causes.<sup>9</sup> This is due to many factors, including semi-arid climates, tremendous reliance on agriculture, weak public health systems, and poverty.<sup>10,11</sup> Even within the same country there can be great inequities which is often referred to as “climate injustice”. In the US, the Environmental Justice Leadership Forum exists to advance climate justice and impact policy to protect communities of color and low-income communities from the negative effects of climate change.<sup>12</sup>

Faith-based organisations (FBOs) have a long history of involvement with global issues from public health to social justice.<sup>13</sup> With climate change classified as the largest threat to public health and a form of injustice, FBOs have a high leverage to make significant impact. The World Council of Churches (WCC), United Nations Environment Programme, Muslim Council of Elders, and the NY Board of Rabbis signed a 2021 joint appeal for climate-responsible financing as a moral imperative towards children as part of efforts in curbing the negative climate effects.<sup>14</sup>

The IPCC recommends mitigation, which is implementing measures to slow the progression of climate change, and adaptation which is building systems that will provide adequate adjustments to increase resilience and reduce vulnerability to its effects.<sup>15,16</sup> Although mitigation is critical, this landscape analysis will focus mostly on climate adaptation measures.

## Adaptation

According to the IPCC adaptation could be defined in two ways: in human and natural systems. Adaptation in human systems is defined as the process of adjustment to actual or expected climate changes and its effect in order to moderate harm or take advantage of beneficial opportunities. In natural systems, it is the adjustment to actual climate and its effects and human intervention may facilitate this process. Many adaptation measures are being implemented across the globe to manage impacts of climate change. Implementation of adaptation measures, according to the IPCC, relies heavily on the capacity and effectiveness of governance and decision making processes. There are currently an increasing number of countries which are including adaptation measures in their climate policies. Furthermore, adaptation to past extreme weather events has proven to make a tremendous impact on the health of the populations for which they were implemented.

Adaptation in LMICs remains a challenge due to several factors. Some sources have noted that there is limited consideration of vulnerability for low socioeconomic populations, children, women, the elderly and indigenous populations. With significant challenges in adaptation policies and implementation in LMICs, it is imperative to take action.

As noted above, although climate change is a major public health threat, conversation around the subject is often controversial in some politically polarized contexts. This means more advocacy is needed that shows the effectiveness of climate adaptation measures and the important link to human health.

Christian Connections for International Health (CCIH) is an international network of approximately 115 Christian organizations, and 15 affiliated partners, as well as a few hundred individual members, all working in over 90 countries. CCIH’s mission is to promote health and wholeness from a Christian perspective, and provides opportunities for capacity building, networking, fellowship and advocacy. ***CCIH carried out this landscape analysis to understand what faith-based initiatives in LMICs exist, how CCIH members understand this issue, where CCIH members are taking action towards addressing climate adaptation and what gaps both in knowledge and capacity remain.*** CCIH will use the results as a starting point in their engagement in this critical area.

## Methodology

This effort is a mixed method study, which includes a literature review, a quantitative survey and qualitative interviews. The study area focuses on Africa, Asia and Latin America, although some of the grey literature covered US-based FBOs. A survey was disseminated through the monthly CCIH newsletter and listserv for any member to complete. Twenty seven members and partners responded to the survey, representing about a quarter of CCIH membership. Out of the organizations that completed the survey, 9 were invited for key informant interviews (KII) based on geographic representation and relevant projects. Two out of these 9 could not participate in the interviews. One out of the 7 responded by writing and did not have a live interview. We acknowledge that members who are involved in climate adaptation would be more likely to respond to the survey and therefore the results may be skewed towards those who are highly motivated by this work. Table 1 shows the CCIH member organizations that participated in the survey and key informant interviews.

*Table 1: CCIH member and partner engagement in survey and KII*

CCIH Member or Partner	Country Focus	Survey	KII
Christian and Missionary Alliance	80 countries	Yes	No
Christian Health Association of Kenya (CHAK)	Kenya	Yes	No
Christian Integrated Development Association of Liberia	Liberia	Yes	No
Christian Medical Association of India	India	Yes	Yes
Community Fountain Organization	Rwanda	Yes	No

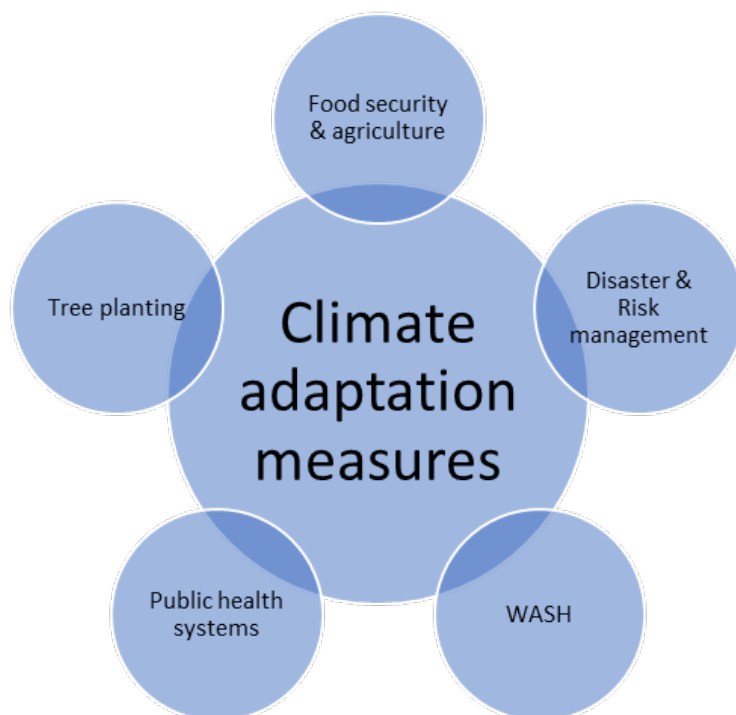
Eglise Methodiste du Togo (EMT)	Togo	Yes	Yes
Global Anabaptist Health Network	Guatemala	Yes	Yes
Healey International Relief Foundation	Sierra Leone	Yes	No
Health Education Program For Developing Communities (HEPFDC)	25 countries	Yes	No
Heartbeat for Africa	Ghana	Yes	No
Independent Global Health Professional	USA	Yes	No
Isaiah 58 Care Foundation (2 responses)	Nigeria	Yes	No
Karin Community Initiative Uganda (KCIU)	Uganda	Yes	No
Kunri Christian Hospital	Pakistan	Yes	Yes
Kupenda for the Children	7 Countries	Yes	Yes
LifeNet International	Burundi, DRC, Malawi, Uganda	Yes	No
Lorel Association	Madagascar	Yes	No
Lutheran Rural Health Center	Zambia	Yes	No
Mennonite Central Committee	37 countries	Yes	No
Mennonite Healthcare Fellowship	USA/Others	Yes	No
SIL Lead	14 countries	Yes	Yes
Tearfund	Rwanda	Yes	No
World Renew	27+ countries	Yes	Yes
Zimbabwe Assoc Church Related Hospitals (ZACH)	Zimbabwe	Yes	No

## Results

### ***Key Findings from the Literature Review***

Key findings from the literature review, survey, and key informant interviews show that most FBOs that address climate adaptation are involved in one of the following five areas: 1) Food security and agriculture; 2) Disaster and risk management; 3) Water, sanitation, and hygiene; 4) Public health systems; 5) Tree planting. This is visualized in the figure out and each area is explained below.

*Figure 1. Key areas where the majority of FBOs are involved*



### **Reforestation and biodiversity conservation**

The literature review revealed that tropical reforestation has both mitigating and adaptive effects on climate change.<sup>21</sup> It is for this reason various stakeholders have advocated for tree planting exercises.<sup>22</sup> Faith actors around the world have actively participated in reforestation campaigns. Mucunguzi et al found in their study in Uganda that that 80% of participants, who were from different religious groups said they had planted and/or maintained trees because of persuasion from FBOs.<sup>23</sup>

The United Nations Environment Program reported how various faith communities are increasingly stepping up to provide nature-based solutions to the growing environmental crises.<sup>24</sup> It was noted the Ethiopian Orthodox church and local residents are trying to slow down the attrition of church-owned forests which they see as symbols of heaven on earth. Other examples cited are planting of trees to reverse environmental decline around the world by Sikhs, and sustainable agricultural practices.

A Rocha organizations operate in over 20 countries and are committed to restoring people and places by providing resources for biodiversity conservation and creation care.<sup>25</sup> The A Rocha African forest program focuses on 4 landscapes across Africa and as a result of this work 50,000 hectares of biodiversity-rich forest are better cared for in Nigeria, Ghana, Uganda and Kenya.<sup>26</sup>

## **Disaster and risk management**

Many FBOs have been involved in disaster management around the world. Though the level of willingness among FBOs to participate in disaster management is high, it was found in a mixed-methods pilot study of disaster preparedness and resiliency among FBOs, that their actual levels of preparedness and awareness were low.<sup>27</sup> Barriers to the preparedness and awareness identified in the study included lack of knowledge and resources, low risk perception and lack of finances. These can limit FBOs from reaching their full potential in disaster and risk management.

A study conducted by Zakiyuddin Baidhawiy in Indonesia on the role of FBOs in the country on disaster management focused on Muhammadiyah, one of the biggest Muslim groups in Indonesia.<sup>28</sup> The study highlighted the two main disaster management programs of Muhammadiyah. The first is building disaster mitigation schools, which in the past years have developed several tools for disaster management and another program that established a disaster preparedness hospital. Furthermore, the Muhammadiyah Disaster Management Center (MDMC) also has disaster response and post-disaster rehabilitation programs.

The United Methodist Committee On Relief (UMCOR) of the United Methodist Church has a global disaster response program where multiple grants have been awarded for the provision of food distribution, shelter repair and basic necessities in the past.<sup>29</sup> UMCOR focuses in Asia, Africa and Latin America.

World Relief, widely known for their humanitarian work in LMICs, is also playing a significant role in building resilience in communities affected by the negative impacts of climate change. Their support to residents who were affected by the volcanic eruptions in Democratic Republic of Congo in May 2021 is a great example of how they are building resilience.

## **Public health services**

Public health services are very crucial in climate adaptation because the current health status of a population may be the single most important predictor of both the future health impacts of climate change and cost of adaptation.<sup>30</sup> Strengthening public health systems through enhancing disease surveillance, improved early warning systems (EWS), identification of vulnerable populations and communities, enhanced preparedness for anticipated health risks due to extreme events such as flooding will safeguard populations.<sup>31</sup>

FBOs have played an invaluable role in health systems strengthening in LMICs.<sup>32,33</sup> However, evidence to support that health system strengthening strategies by FBOs and their effects on climate adaptation in LMICs is not available. This is a missed opportunity and should be integrated into current strategies and documented.

## **Water Sanitation and Hygiene (WASH)**

Severe weather events such as floods and storms can cause serious disruption of WASH provisions in health facilities. This presents a disastrous opportunity for diarrheal and other infectious diseases in the affected areas. Therefore WASH becomes an integral part of planning climate adaptation. FBOs



play important roles in the provision of potable water, public toilet facilities and personal hygiene promotion in LMICs and provides an opportunity for climate adaptation.<sup>34</sup> The Bangladesh Rural Advancement Committee (BRAC) incorporated imams into their WASH programs.<sup>35</sup> Two hundred imams were trained and provided with sermon guides with verses from the Quran and Al hadith. An estimated 18,000 imams are now teaching sermons on hygiene and also encouraging men in domestic chores.

## **Food security and agriculture**

The World Food Programme reported that religious communities and leaders have contributed to global campaigns by acting as champions and engaging in resource mobilisation. An example is Diocesan Development Services (DDS) by the Catholic Diocese of Idah in Nigeria which operated a financial service program used to support food security for over 30 years.<sup>36</sup> The program targeted crop production, storage, processing and nutrition. World Renew has also included food security as an important part of their mission, enabling communities to have consistent and reliable access to safe food to meet their dietary needs.<sup>37</sup> They train local farmers on sustainable agricultural practices and the growing of climate sensitive crops. `

## **FBOs based in the United States**

There are many FBOs in the US that provide advocacy, education, and other services locally and on a global scale. For example, Caretakers of God's Creation is a branch of the Global Ministries of the United Methodist Church and engages in some climate change mitigation projects.<sup>17</sup> They operate on the belief that caring for God's creation is integral to being a disciple of Jesus Christ. Their work is aimed at providing clean air, land access to clean water, and the ability to grow food in the midst of changing agriculture cycles. They are also focused on promoting a shift away from fossil fuel-based economies to alternative renewable energy. They fund renewable energy projects in LMICs, including solar arrays, wind turbines and other renewable energy strategies.

Another example of addressing climate change on the principle of equity is Creation Justice Ministries (CJM). The organization is operating to overturn the unfair reality that low-income communities which contribute less to the causes of climate change are the most affected by the impacts. They advocate for climate resilience through sharing resources from virtual workshops on how churches can become climate resilient.<sup>18</sup> Their work in environmental health and toxins includes providing education and advocacy opportunities for people of faith on environmental issues such as safe cosmetics and toxic chemicals.<sup>19</sup> Furthermore, CJM has engaged in a 'loss and damage' project which they define as the harm caused by climate change which is unavoidable and impossible to adapt to, such as small islands becoming completely submerged. For this initiative, the organization called on the US government to prioritise the needs of the most vulnerable during the COP 21 climate negotiations in Paris.

Greenfaith is another US-based FBO working in the area of climate change. One of the most striking projects they have commenced is the "multi faith climate finance campaign".<sup>20</sup> In this campaign, they focus on the world's biggest asset managers which invest billions in coal, oil and gas projects. This campaign, much like CJM focuses on bringing the world on a path of a just and sustainable future. They spread evidence of large corporations perpetuating deforestation. They believe it is a violation of the human rights and legal protections of Indigenous peoples and must be stopped as a moral imperative. The campaign brings together different faith groups such as Hindus for Human

Rights, World Council of Churches, Islamic Society of North America and others. Though the organization is US based, their impact is felt in some LMICs such as those in the Amazon region.

## **Key Findings from a survey of CCIH members**

### **Analysis of qualitative responses**

#### **What does climate adaptation mean to your organisation?**

50% said adaptation was an intervention that helps to adjust to the changing climate and reduce vulnerability. There were other varied responses such as reducing carbon footprints, improving health while reducing disease risk factors, and raising awareness of the problem in more powerful ways.

#### **How is your organisation addressing climate adaptation?**

The main area of climate adaptation response by CCIH members is through food security and agriculture programming by encouraging environmental friendly agricultural practices and reducing food wastage. Others are involved in education, blog posts and communication, and advocacy. One organisation is engaged in campaigns against deforestation and encourages afforestation (the process of planting trees and plants in barren lands devoid of any trees previously). A key organisational practice of changing annual meetings to be more climate friendly (i.e. less travels for members, bike and Amtrak accessible, solar powered locations) was captured.

#### **If you had an opportunity to talk to an expert on climate and health, what question would you ask?**

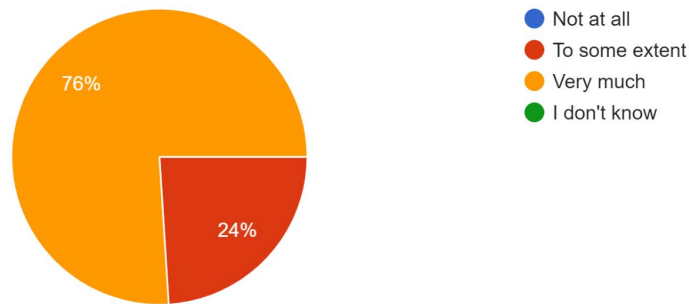
More than 50% asked questions related to interventions that address the impact of climate change. Specific areas of concern ranged from the effect of health, specific vulnerable populations like women and children, food security and disaster management and preparedness. A fifth of the respondents asked questions about the impact of climate change and health. Others asked about how to incorporate climate change into health programs, the ethics of maximising health benefits today versus building more resilient systems for the future, and how the church (and FBOs) can effectively communicate climate change messages to the congregation.

### **Analysis of quantitative responses**

1. 60% of respondents consider climate change to be a major threat while 36% consider it to be a threat to some extent
2. More than three quarters of respondent believe FBOs should be involved in climate adaptation (See figure 2)

*Fig 2. Extent to which respondents believe FBOs should be involved in adaptation*

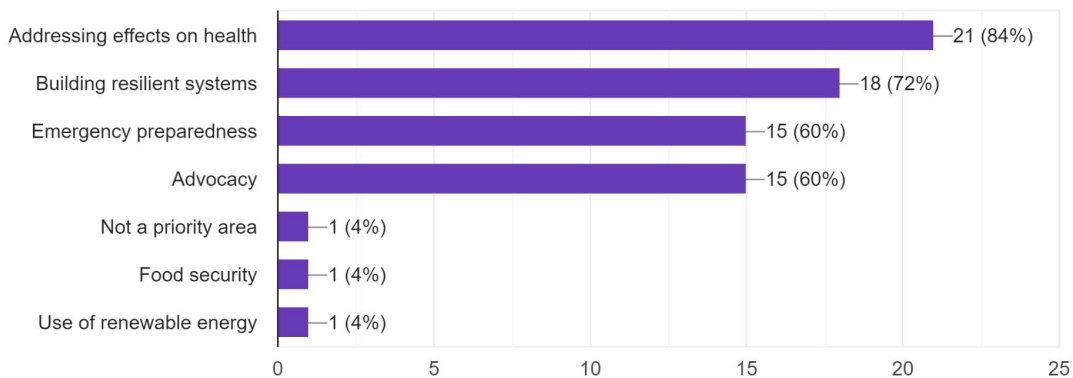
How involved do you think that faith based organizations should be in climate adaptation?  
25 responses



3. The majority of respondents consider that climate change has major negative impacts on ecosystems and physical health but are less sure about the impacts on mental and spiritual health.
4. 88% of respondents have the interest to engage in climate discussions and to hear more about climate adaptation from CCIH
5. 80% of respondents use the term “climate change”, the next most commonly used terms are “environmental health” and “environmental stewardship”
6. One quarter of respondents said that climate change is very much affecting their operations. Another 72% said that climate change is affecting their operations to some extent.
7. The majority of respondents are very concerned about climate change induced changes in disease vectors, droughts and floods, changes to regional nutrition, and severe weather affecting their programming. Respondents are less concerned about the displacement of people along coastlines affecting their programming.

Fig 3. Areas where members are eager to learn more about.

What would your organization like to learn more about related to climate adaptation?  
25 responses



## Key Findings from Key Informant Interviews with CCIH Members

KIIs were conducted with 7 organisations out of those listed in Table 1. There were various responses to how participating organisations recognise and respond to climate change. Three broad areas of climate adaptation were consistently referenced during the interviews and they are advocacy, agriculture and reforestation. Related to these areas, KIs talked about extreme heat waves which necessitated planting of trees, droughts causing nutritional deficiencies that lead to the need for food security programs, increased disasters calling for system preparedness and response, and the rise of infectious agents generating a larger provision of healthcare delivery to vulnerable populations.

All participants acknowledged that climate change affects their programs; however, the effects are experienced in different ways. While most mentioned severe weather events which impacts agricultural activities negatively, others highlighted the increase in infectious diseases which subsequently increase disabilities. As the effects of climate change are more severe on vulnerable populations, it can be expected that people with disabilities will suffer more as the threat of climate change continues. One member organisation working with people with disabilities is in the process of developing a paper to assess the degree to which climate affects people with disabilities. Furthermore from both the survey and interviews it was clear that language used in climate change was difficult to translate words like global warming and carbon footprints into minority languages. Migration of some communities was also linked to severe droughts.

Some of the specific climate related measures that were reported by the respondents include:

- providing low cost healthcare for community members
- tree planting exercises
- limiting usage of single use plastics
- limiting usage of electricity
- investing in renewable energy and water treatment.

When asked about the impact of existing national climate adaptation policies on the various programs, while most said their work was in line with the existing policies, a few did not link their work to it. Conversely, some countries, particularly in Latin America, expressed the challenge that the government is the source of misinformation about climate change to avoid responsibility for the increased negative effects experienced by the populations they represent/serve.

KIs said they partner with other agencies in their programs. Some partner strongly with the government, while others partner with local organisations and other international organisations. All organisations said they were aspiring to scale up their partnerships and adaptation programs. Challenges facing organisations ranged from resource mobilisation, language barriers, and lack of support from the government. All KIs ascribed their organisational action in climate adaptation to their faith in that they are driven by the responsibility enshrined in the Holy scriptures to take care of God's creation. Some specified the fact that people from low income settings suffer the most from the effects of climate change even though they contribute the least to it and we need to follow Jesus' example of social justice.

The KIs pull from many sources of information including the UN websites, WHO, IPCC reports, ACT Alliance, and government websites.

One important part of the KIIs and surveys were asking members what support CCIH should be providing in this area. Responses can be seen in Table 2 below:

*Table 2: Key recommendations to CCIH and other FBOs*

Recommendations to CCIH	Recommendations to other FBOs
Share intentional communication about the intersection of climate change with health. It is especially important to focus on the language because finding the correct terms such as climate change, global warming, carbon footprints in local languages is difficult. Therefore translating these terms into simple English and French phrases could facilitate translation to minority languages.	Share about the impact of climate change with communities who are less affected, especially in HIC through climate witnessing. It is clear that farmers in the rural areas can see the effects of climate change in their farming work and other areas of their lives however people in HIC may not have that first-hand experience.
Initiate south-to-south climate learning sessions in order to enhance their adaptation programs.	Encourage more faith partners to get involved. Climate change needs immediate action in all sectors.
Help facilitate funding opportunities for members addressing climate adaptation.	Network with other FBOs involved in climate adaptation for knowledge sharing.

## Discussion and conclusion

Information gathered through the literature review revealed that climate adaptation measures are being implemented by FBOs through existing programs. For example, WASH, risk assessment, disaster management, agriculture and food security, and health systems strengthening are all existing programs which have climate adaptive effects. Tree planting exercises were also a common intervention by FBOs which are generally captured in white literature. Narrowing down to the direct climate adaptation actions, most of the data were found in grey literature. Many of the FBOs who are directly involved in climate projects were US based but many were found to have global reach. Literature review showed that FBOs have a high willingness to participate in the fight against climate change and implement adaptation measures but preparedness to do so is low.

Analysis from the survey and key informant interviews confirmed that FBO respondents have a high level of willingness to implement climate adaptation programs, as the majority of the participating organizations expressed an interest in learning more about the impact of climate change on human health and what can be done to adapt to a warming world. CCIH is exploring the reasons why members did not participate in the survey which could include lack of time, alignment of interest, funding availability, and level of capacity in this area. Organizations who were directly implementing climate adaptation programs were mainly focused on advocacy, campaigns, agriculture and tree planting. Some of the FBOs have direct programs, while some are applying mitigation measures such as reducing carbon footprints. Among these measures are reducing travel times, using more climate friendly transportation such as biking and public transport, reducing usage of single use plastics, low energy consumption and investment in renewable energy. Some organisations were looking into how to incorporate climate adaptation into their programs as their work is very affected by it.

Existing national adaptation plans have a major impact on programs led by FBOs. In some countries (India) existing policies facilitate the adaptation programs while in other countries (Guatemala) lack of climate policies and misinformation from government decelerate climate actions.

It was also clear from this study that what motivates FBOs in their actions to address climate adaptation is their faith and call to social justice. FBOs believe it is their God-given responsibility to take care of the environment as part of their call to love their neighbor. These findings are crucial for CCIH as it will seek to put them into action in the near future.

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