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**FEATURE** 

# Climate Change Advocacy through the Arts: The IMCC Kapagintaw Ethno-Rock

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Abstract. Climate scientists have stated that humans are responsible for causing global warming and climate change, subjecting people to hazards, disasters and extreme shortages of basic needs such as food, water and shelter. Art has a unique way of stimulating people to think and feel about the impacts of climate change. This case study describes how the Kapagintaw Ethno-Rock Band of Iligan Medical Center College held lecture-concerts on climate change around major places in Mindanao, using traditional music and dance, while getting people to participate in the discussions on climate change and move them into action. Most of the music they played was of their own original compositions and of local artists. As a result, the community became motivated to get involved in climate change advocacy and in projects in connection with climate change.

**Keywords:** Climate change, mitigation, adaptation, traditional music and dance, Kapagintaw Performing Arts Guild, Iligan Medical Center College, Mindanao, Iligan City, Philippines

### Introduction

Climate change is a major global challenge in our lifetime (Cook, Oreskes, Doran, Anderegg, Weheggen, Mabach, & Carlton, 2016; Onokarye, 2011), and music is an expressive medium to advocate for climate change and environmental protection (Duxbury, 2010; Hollo & Rimmer, 2014). The arts evoke a variety of emotive responses on climate change that transcend language barriers and unite cultures in sensing the changing world (Duxbury 2010). Onokarye (2011) pointed out that the Intergovernmental Panel on Climate Change affirmed that climate change is the most serious threat facing humanity, and that there is a need for

drastic actions to mitigate the impacts of climate change. Further, if we fail to heed the warning, future impacts of climate change to society and to the environment will be more difficult and costly to handle.

The Philippines is a country that is constantly battered by climate-related weather catastrophes, mainly because of its geographic location and its geological characteristics. The country is situated along the Pacific Ring of Fire and is bounded by bodies of water that make it vulnerable to multiple hazards such as earthquakes and typhoons (Iligan City Disaster Risk Reduction Management Council, 2013). The Global Climate Index ranked the Philippines as the 5th most affected country by climate change in the last two decades, with an average weighted rank index score (CRI) of 21.33, a death toll of 861.55, total losses in million dollars of \$ 2, 761.53, in 283 weather-related events (Kreft, Eckstein, & Melchior, 2017). While statistics and historical accounts indicated that Northern Mindanao, or more specifically Iligan City, is not within the normal path where tropical cyclones cross, the city experienced a major flooding caused by Typhoon Washi (local name, Sendong) in 2011, which claimed more than a thousand lives (Tejero, 2015; Viloria, Bracamonte, Mendoza, Ponce, Embornas, & Landong, 2014).

In advocating for climate change, the Kapagintaw Ethno-Rock Band, a resident performing arts group of Iligan Medical Center College (IMCC), gave lecture-concerts on climate change to communicate to its audience the urgent need to do something for the environment. *Kapagintaw* is a Maranao term meaning, "living together to join efforts for transformation towards quality of life" (Hamm, Macaraya & Bayabao, 1952). True to its name, this bnd advocates environmental protection and climate change adaptation. The band is composed of student artists selected through auditions. The music of the band is a fusion of ethnic and poprock music genres, and its orchestra uses both traditional and Western instruments. Indigenous musical instruments include *kulintang* (an eight-gong ensemble), *dabakan* (a large conical drum), *agong* (a huge brass gong), *bandil* (a small brass gong), *tambol* (a small drum), *karatong* (a bamboo xylophone), and *hegalung* (a two-stringed lute also called *hegalong*). The first three instruments are from the Maranao, the next two are from the Higaonon, the next is from the Maguindanao, and the last is from the Manobo.

The Western instruments include electric guitars, a keyboard, and a drum set. The Kapagintaw was organized in 2005 as a cultural dance troupe. It attracted many students that, after two years, it was necessary to split the group into two, with one specializing in music, and the other in dance. The group that specialized in music evolved into the Kapagintaw Ethno-Rock Band, while the group that specialized in dance evolved into the Kapagintaw Dance Troupe. With each group specializing in their respective areas, they both excelled artistically and won in several competitions. In the year 2009, after a good track record of performances, the IMCC Board of Directors decided to give scholarships to each student-artist of

both groups. The Kapagintaw Ethno-Rock Band sees itself as a band of artists working together in raising awareness on issues related to climate change through music, dance, and other creative expressions towards actions to combat its negative impact.

#### **Theoretical Framework**

This case study on climate change advocacy through the arts is anchored on the theories of Duxbury (2010), and Hollo and Rimmer (2014) that artists have the potential to engage their audience in promoting behavioral and cognitive change for the environment through emotional and experiential ways. Arts can mediate for the environment through creative ways, by using both verbal and non-verbal communications that science is not able to do. It can transcend language barriers, unite cultures, and is able to communicate at both global and local levels.

In the context of climate change research, the Kapagintaw Ethno-Rock Band has offered to the public their work of art in the songs they sing and the projects they did with the community on climate change, by adopting the theories stated above. Their immense concern for climate change advocacy is founded on the scientific evidence proving that human activities have greatly altered global change, jeopardizing our very survival (United Nations Intergovernmental Panel on Climate Change, 2017).

### **Review of Related Literature**

## The Global Threat of Climate Change

The United Nations Intergovernmental Panel on Climate Change (2017) has affirmed that climate change is considered the most serious global threat to humanity, and that this issue is attributed to human-induced greenhouse emissions. Onokarye (2011) pointed out that climate change has subjected a large number of people around the world to extreme hunger and poverty. Consequently, the most affected people are those living in developing countries.

## **Differentiated Responsibilities for Climate Change**

The United Nations Framework Convention on Climate Change established the principle of common but differentiated responsibilities among nations, suggesting that industrialized nations that produce the greatest share of emissions bear some particular responsibility for preventing dangerous interference with the climate system. Frumhoff, Heede, and Oreskes (2015) did a study on the climate responsibilities of industrial carbon producers, and pointed out that the concept of responsibility is central to the question of obligation to act. This means that major investor-owned fossil energy companies should carry the biggest responsibility in

mitigating climate change. Munoz and Sommer (2011) argued that although climate change may have been caused by rich countries, the rich countries alone cannot solve the problem. Climate action should be a common endeavor by both developed and developing countries. Similarly, Mertz, Halsnaes, Olesen and Rosmussen (2009) argued that although most human-induced emissions of greenhouse gases are mainly from developed industrialized countries, the consequences are better realized in developing countries.

Onokarye (2011) pointed out that the usual response to climate change of developing countries is *adaptation* rather than *mitigation*. Adaptation to climate change is important to developing countries because people in these countries usually bear the brunt of the effects of climate change. Adapting to changes around us is a basic human response and because of the slow action in implementing mitigation measures, people need to adapt to climate disasters. In differentiating between adaptation and mitigation, Onokarye explained that *adaptation* addresses the effects of climate change, while *mitigation* focuses on its causes.

### A Climate Risk-Resilient Philippines

The Climate Change Framework envisions "a climate risk-resilient Philippines with healthy, safe, prosperous and self-reliant communities, and thriving and productive ecosystems" (p. 1). The strategy to arrive at this vision is to manage the natural ecosystems from "ridge to reef" or from mountain to sea (Climate Change Commission of the Philippines, 2010).

Franta, Roa-Quiaoit, and Narisma (2016) pointed out that climate change preparedness and resilience efforts are currently ongoing in the Philippines. The most common approach is raising awareness of risk, and finding local solutions to reduce climate-related risks through capability-building programs. Florano (2014) pointed out that climate change preparedness and resiliency must be decided by the community in collaboration with various sectors and stakeholders of society, in a collaborative effort.

## Climate Change Advocacy through the Arts

Abelardo and Vince Cruz (2017) argued that art is a powerful tool for environmental advocacy as seen in Philippine indigenous and contemporary art practices. The case studies on the Talaandig tribe of Bukidnon in Northern Mindanao and selected artists from Metro Manila revealed that these artists support the global campaign for environmental conservation and sustainability by using repurposed materials in art production. Their art works resulted in decreased carbon footprint, and at the same time promoted climate change advocacy.

Curtis, Reid, and Reeve (2014) synthesized previous publications to see how the arts shape environmental behavior. They found that while literature suggests that the arts may have a role in shaping environmental behavior of individuals and *June 2018, Vol. 21, No. 1* 

society, there are no clear statements on how this might occur. The authors proposed three pathways towards environmental sustainability: communicating information, creating empathy for the natural environment, and embedding the arts in ecological sustainable development.

Wilson (2010) observed that there is a growing recognition of the contributions of arts and culture in addressing environmental issues such as climate change. Climate change is a hot topic in public opinion and media, and yet people do not have a clear understanding of its issues. The effects of climate change call for creative and innovative. Artists and different fields must respond to climate change and its related issues. Collaboration between East and West and between Asian and European cultures could bring additional values for ecological sustainability.

Munoz and Sommer (2011) compared the role played by the media and the arts in shaping public opinion on climate change. Their study revealed that both media and art have a high potential for communicating climate change issues. However, media did not seem to have done as well as it could because of the issue of "balanced coverage" in which they have to present both pros and cons on climate change, while art can be more effective in shaping public opinion on climate change and can mobilize people for positive action.

Duxbury (2010) argued that artists have the potential to engage their audience into emotional and experiential ways in understanding the issues on climate change. Hollo and Rimmer (2014) contended that since climate change is a cultural issue, the role of arts and artists in helping tackle climate change issues should be seen as vital and central to their endeavors. Hollo and Rimmer (2014) contended that in educating audiences on climate change issues and motivating them to take part in social action, artists may use song lyrics on climate change issues. William Danaher (as cited in Hollo & Rimmer, 2014) pointed out that music has power to exercise or undermine social control. Music and rhythm have been central to human history in motivating people to take action for the benefit of society.

Nease (2015) described how the British artist David Buckland transformed the conflict over the Nile through educating and inspiring a global network of students who focused on sustainability of their ecosystem. The project integrated music, education, dialogue, leadership and innovation in engaging students for action. Frasz (2016) conducted an interview with Leiserowitz on the same subject of art and climate change. In the interview, Leiserowitz explained the two processing systems of the brain, which are the experiential system and the analytic system. The experiential system deals with feelings and emotions and is strongly connected to human values, attitudes and worldviews; while the analytic system deals with reason and logic. Western cultures tend to be analytic, putting reason over emotion, while Asian cultures tend to be emotional. These two systems have, howver, become inseparable. There is a continuous interplay between reason and emotion, affect and analysis, in how we operate and make sense of the world.

After reviewing literature, it became evident that there is limited research about arts as an advocate for climate change. The literature found was mostly reports on art conferences and surveys on opinions. This paper on climate change advocacy through the arts can help fill this gap in literature.

This case study on climate change advocacy through the arts explored how the Kapagintaw Ethnic-Rock Band advocated for climate change awareness and motivated its audience to participate in climate change activities, with the help of research participants who answered the following research questions that guided this study:

- 1. How did the Kapagintaw Ethno-Rock Band motivate its audience for action to combat the negative effects of climate change?
- 2. What are the experiences on disasters that motivated the audience to do something for the environment?
- 3. What activities on climate change did the audience participate in as a result of their learnings and challenges received from the concert?

## Methodology

## Research Design

This study utilized the case study approach of Stake and Yin (as cited in Creswell, 2014) in which the researchers develop an in-depth analysis of an event or process. The case study is appropriate in describing the Kapagintaw Ethno-Rock Band of IMCC, in advocating climate change through the arts, and transforming the lives of people to take care of "Mother Earth," their only home and the key to their survival.

## **Participants Sampling and Research Setting**

There were 15 participants of this study. Eight participants were students and seven were community members. The participants were purposively selected regardless of age and sex based on the follwing criteria: 1) for the eight student participants, they must have been bona-fide students of IMCC, who had watched the Kapagintaw concerts anytime between 2013 to 2017 at any venue; 2) for the seven community members, they must have witnessed the concerts of the Kapagintaw Ethno-Rock Band at any venue, between 2013 to 2017; 3) all 15 participants must not be members of the Kapagintaw Ethno-Rock Band.

The study was conducted in Iligan City, Philippines. The city is located in Northern Mindanao, Region 10, Philippines, which is about 800 kilometers southeast of Manila, the capital city. It had a population of 342, 618 (Census of 2015), living in an area of 81, 337 hectares. It is geographically bounded in the north by Misamis Oriental, in the south by Lanao del Norte and Lanao del Sur, in *June 2018, Vol. 21, No. 1* 

the east by Cagayan de Oro City and Bukidnon, and in the west by Iligan Bay (Iligan City Government, n.d.).

Informed consent was solicited from the participants, and they all voluntarily agreed to be part of this study. This study also sought the approval of the IMCC Ethics Review Committee; it passed the criteria on ethical standards set by the institution.

#### **Data Collection Procedures**

In the gathering of data for this study, key informant interviews were conducted based on guide questions. Participants were free to answer anything, such as description of the songs, their thoughts, and their feelings. We asked additional questions only for clarification purposes, and not to influence the answers of the participants. Interviews were recorded using digital recorders and field notes were taken.

## **Data Analysis and Validation**

The thematic analysis of Braun and Clarke (2006) was used in identifying and analyzing themes generated from textual data gathered. The following steps were followed: 1) assigning codes to participants; 2) transcribing verbatim the verbal data; 3) translating data from Visayan to English; 4) highlighting key phrases; and 5) defining key phrases and labelling these into themes. Results were presented back to the participants for critique and validation. Adjustments were done after suggestions were given by the participants.

#### Results

Findings of this study follow the order of the research questions. In answering Q1: "How did the Kapagintaw Ethno-Rock Band motivate its audience for action to combat the negative effects of climate change?" The participants responded by identifying their favorite songs that touched them emotionally, and by appreciating the style of the concert. By identifying their favorite songs that touched them emotionally, six themes emerged: Lamenting with Mother Earth, Celebrating Life with Joy, Enjoying Harvest Time, Awed by the Beauty of the Falls, Challenged by the Wake Up Call, and Ready in Answering the Call. By describing the style of the concert, the following themes emerged: ethno-eock fusion, singable melodies, danceable tunes, and mixed media advocacy.

## **Songs that Evoked Emotions**

**Lamenting with mother earth.** The Kapagintaw Ethno-Rock Band educated their audience by singing songs that emotionally moved people. One of the songs they portrayed was the lamentation of Mother Earth. It evoked feelings of sadness,

and five participants responded to this song, tear-eyed. Five participants selected this song as the one that touched them most. Participant 1 describes her feeling thus:

I was in Davao when I heard the Kapagintaw performed in the NCCC mall in Matina, Davao City. They sang for the benefit of the survivors of Bagyong Pablo of Compostela Valley. I was tear-eyed when they sang a song of lamentation of Mother Earth. A ritual was performed while the song of "Haring Araw" was sung. The English translation of the song goes this way: "Majestic Sun, bring out your brilliant light and shine, and drive out the spirits of darkness, so that Mother Earth will live and be restored back to health."

**Celebrating life with joy.** Another song that the Kapagintaw sang was a song of celebration, entitled *Ipagdiwang ang Buhay*. It was so lively that the audience danced, sang, and jumped for joy. It was a pleasant time for everyone. There were 13 participants who liked the song of celebration *Ipagdiwang ang Buhay*. Participant 3 describes this feeling below:

I like most the "Ipagdiwang ang Buhay," meaning, "let's celebrate life". When the Kapagintaw invited the audience to dance, sing, and jump for joy and enjoy the beauty of nature, I participated, and I enjoyed it. The song was a celebration of life. They portrayed Iligan with its beautiful waterfalls, and the river Mandulog was flowing from the mountains to the sea. Now I know the meaning of Iligan. It comes from the word "Ilig," meaning, to ride along with the current of the river. I imagine myself being carried by the river and floating gently to the sea.

**Enjoying harvest time.** A harvest song entitled *Anihan Na* was sung by the Kapagintaw Ethno-Rock Band, and as they sang this song, some of them were dancing Higaonon dances. In Iligan City, the Higaonon tribe lives in the mountains of Rogongon, and they celebrate harvest time, which they call Kaamulan during the month of October, when the moon is full. The celebration lasts for days, and people in Iligan usually go to that village in Rogongon and enjoy feasting with the people there. There were five participants who liked this song. Participant 2 was touched by the song as described below:

I like the song "Anihan Na". It is a song of harvest. The Higaonon of Iligan celebrate thanksgiving for bountiful harvest when there is full moon in October. The celebration lasts for days. I love the dances of this tribe as they dance inside the bamboo mat, thanking God for the bountiful harvest, and asking Him to drive away the storm, so that the crops will yield bountiful grains.

**Awed by the beauty of the falls**. As the Kapagintaw sang the song *Tinago* and described it as a hidden paradise. They had a video of the falls with people enjoying its beauty. The falls referred to is one of the 23 waterfalls of Iligan City.

It has become a touristic spot, attracting many people to view the falls. There were seven participants who liked this song. Participant 4 describes his feelings as he watched the Kapagintaw portray the falls with their song and video:

I like the song "Tinago," meaning, "hidden." It tells about Tinago, the hidden waterfalls of Iligan City. "Paraisong Nakatago" means "hidden paradise". The waterfalls is found in the midst of the forest, and in going to it, you climb a stairway or rocks, and get near it to feel the water from the falls. The falls has a lagoon surrounded by green vegetation, and usually, at 3:00 o'clock, a rainbow could be seen above the waterfalls. Wow, what a beauty!

Challenged by the wakeup call. Many of the participants were challenged by the wakeup call of the Kapagintaw as they rendered their songs *Gising Kaibigan* and *Sagipin ang Kalikasan*. Many of them became environmental activists, especially those who had experienced flood disasters and hazards. Nature will one day take revenge on people, and therefore, people should stand for environmental protection, and must actively prevent people from destroying the environment. As many as 13 participants were challenged by the wakeup call song. Participant 5 expressed his feelings with the statement below:

I am challenged by the songs, "Gising Kaibigan" meaning, "wake up friend," and "Sagipin ang Kalikasan," meaning, "protect the environment". The songs are a wakeup call for people to stand against the massive destruction of forests, mountains, and the waterways! These destructions have caused floods, droughts, and the extinction of living things, greatly affecting people! Yes, I agree that we have to protect the environment. Mother Earth is our only home!

Crying while remembering Sendong. Most of the participants cried when the song about Tropical Storm Sendong was sung. It reminded them of that day in December 2011 when the tropical storm caused Mandulog to overflow its banks and drowned many people. They also remembered the big logs that were carried by the flood, and the resulting destruction of people's homes. All of them resolved to rise up from their sad experiences and learn the lessons of Sendong by protecting the environment. There were eight participants who were very emotional as they remembered their experiences on Sendong while the song was sung. Participant 8 had this to say:

The song about Sendong, the storm that killed more than a thousand lives, is very touching. I cried when the Kapagintaw described the destruction in their song Sendong. Mandulog River overflowed its banks, and nature's fury was experienced by everyone. The chorus of the song is so challenging: "mobangon kita, magkahiusa kita, magkat-on kita, aron molambo. Ang kinaiyahan ampingan." (Let us rise again, let us be one,

let us learn our lessons, so that we will prosper. Let's protect all nature, for these are gifts of God).

**Ready in answering the call.** After participating in the Kapagintaw climate change concert, the participants felt that they were ready to answer the call of becoming activists in protecting the environment. They resolved to take part in the different activities of the community, such as planting trees and cleaning the rivers and the seas. They resolved to nurture their plants, until these become big enough to withstand any storm. There were eight participants who liked this song. Participant 7 expressed his readiness with the statement below:

Hoy, Kumilos Ka, meaning, hey, act now, is a powerful song that calls us all to participate in reviving nature. Yes, we have to clean the rivers and the seas, we have to plant trees, and take care for all living things. The Kapagintaw band is so persuasive that we cannot say no, because it is for our own good. I am glad that I watched the concert, because I have learned so much on what is going on with our environment, and what we must do to restore nature back to health.

## **Performance Style**

In describing the performance style of the concert, the following themes emerged: *ethno-rock style*, *singable melodies*, *danceable tunes*, *mixed media advocacy and interactive style*. Below are the experiences of the participants in watching the climate change concerts of the Kapagintaw Ethno-Rock Band.

**Ethno-rock fusion.** The Kapagintaw Ethno-Rock Band combined elements of ethnic music and rock music of percussion and strings. In accompanying their songs, they used ethnic percussive instruments of gongs and drums of the Maranao, the Manobo, and the Higaonon tribes and blended them with Western-type drums. All the participants noticed this fusion. Seven participants liked this idea of the fusion of instruments, because the instruments strengthened their ethnic identity. Participant 6 stated,

I was amazed when I saw the Maranao kulintang used by the Kapagintaw Ethno-Rock Band in accompanying their songs and dances. I never heard of that before. The instruments blended well. How did they do it? I also saw other ethnic instruments, which I could not identify. I am a Maranao, and I love hearing the kulintang played.

**Singable melodies.** Many of the concert songs of the Kapagintaw Rock Band were performed under the guidance of their music director. They used either original lyrics set to familiar melodies or English songs translated into the vernacular language and set to original melodies. Aside from their "original" compositions, they also used popular compositions of other composers. Ten participants reacted favorably to the singability of the songs. Participant 9 described her experience as follows,

The songs sung by the Kapagintaw Ethno-Rock Band were singable. There were familiar and unfamiliar melodies. Even the unfamiliar songs can be learned by the way the Kapagintaw taught us. I sang with them the "Rain, rain, go away," a children's rhyme, which I learned when I was in the elementary grades. This was translated into Filipino to "Ulan, Ulan, Umalis Ka." The unfamiliar songs were sung phrase by phrase in a responsorial manner, wherein the Kapagintaw would sing a musical phrase, and the audience repeat after them. I enjoyed those songs.

**Danceable tunes.** The Kapagintaw Ethno-Rock Band played danceable tunes in their concerts, to sustain the interest of the audience. Many of their tunes are jazzy, which are appreciated by teenagers and adults alike. There were 12 participants who expressed joy in dancing along with the music of the Band. Participant 10 described the concert as follows,

I enjoy dancing, and when the Kapagintaw Ethno-Rock Band asked the audience to dance along with them, I did. It was so elating! We were asked to create our own movements and to go with the jazzy music. The tunes evoke beautiful expressions of joy!

**Mixed media advocacy.** In advocating for climate change, the Kapagintaw Ethno Rock Band used multimedia tools. They used video clippings on climate change, they gave out power-point presentations on climate change, and they called for audience participation in singing some of their songs, and in dancing to their tunes. They also were impressed because of the interactive style that they did. They had to be alert, since there were questions on climate change that they were asked to answer during the concert. Participant 11 describes how the Kapagintaw Ethno Rock Band used these multimedia tools,

I was able to internalize what is climate change, because the Kapagintaw Rock Band used multiple media tools. They used video clippings on what is climate change about and its effects to the community. They gave lectures in power-point format. They sang songs on climate change, presented this in power-point, and invited us to sing along with them. They also asked us questions, to test us whether we understood the presentation or not. It was so effective in making us understand what climate change is.

In answering Q2: "What are the experiences on disasters that motivated the audience to do something for the environment?", the following themes emerged: waterspout over the river, river tsunami that formed a huge wall, family on a rooftop, from the river to the sea, fallen from the hanging bridge, a faithful dog, saved by a tree, landslide buried homes, huge logs seen in the river, and drought destroyed the crops.

**Waterspout over the river.** Participant 12 saw a water spout during the night of December 16, 2011 in his village upstream. He described what he saw below:

I saw a waterspout from a distance. I think it was over Mandulog River uphill. It was night time, but the sky was bright, and the waterspout was like a huge black mushroom in the sky. Then suddenly, the wind whistled with a deep howling sound, and the rain became stronger. Then the river flooded the entire village. Our house was built on the mountain, and it withstood the storm, although part of it was destroyed.

**River Tsunami that formed a huge wall.** Participant 6 described his experience of a river tsunami during the occurrence of Typhoon Sendong. Below is his story:

It was terrible to think of the floods that formed into a huge wall as it hit the bridge and broke it into two! The flood waters flowed towards the sea, carrying people and debris. Many people were killed, and many others went missing.

**Family on a rooftop.** Participant 13 described her experience while her family went to the rooftop of their home when the waters got high. Her home did not withstand the storm because of the logs that knocked it down. Below is her story:

The waters rose to about 15 feet high, and so my husband, my daughter and my grandson took refuge at the rooftop. We were at the rooftop for about five hours, but our two-story concrete house collapsed, when the logs hit it, and so we fell into the floodwaters, and were carried away to different directions. Luckily, we were saved by rescuers, one after another. I was united with the other members of the family the next day. Our family was among the few who were lucky to survive the flood.

**From the river to the sea**. Participant 14 was carried by floodwaters from the river to the sea, while holding on to a log. She was rescued on the next day, cold and exhausted. Below is her story:

I was twelve years old when the floods happened. Our home was crashed by logs, and our family, including our pets, was carried away by the flood. My mother and I took hold of a log, and held on to it, not minding the pain from the other logs that hit our bodies. We were carried to the sea, and the next day, we were both rescued. My father and my brother went missing to this day.

**Fallen from the hanging bridge**. Participant 15 was crossing a hanging bridge while going to his home in Pugaan village, located upstream of the river, but the bridge snapped and he fell down to the river. Below is his story:

I was crossing the hanging bridge in Pugaan, and it was wildly swinging to and fro when it broke, and then I fell down the river. I was carried away by floodwaters to the downstream villages, and there I was rescued.

A faithful dog. Participant 1 was a typhoon survivor from the coastal area who volunteered in a search and rescue team. He and his group were retrieving dead bodies, and a dog aided him by providing a clue on where to find a body. Here is his story:

Experiencing Tropical Storm Sendong was a nightmare. When our village was flooded, I was carried by floodwaters to a nearby barangay, and there someone saved me. As gratitude for being saved, I joined a team of volunteers rescuing survivors, and looking for dead bodies. In one of our trips to the barangay, we saw a dog which was wailing, and digging into the debris. It occurred to me that there might be a dead body somewhere. We started digging, but the debris was very thick. Early the next day, we requested a backhoe from the government to help us dig the thick debris. Sure enough, a body of a man was recovered. He must have been the owner of that faithful dog.

**Saved by a tree**. Participants 2 and 8 had similar stories of being saved by climbing coconut trees. They were both living in a village located downstream. Below is the story of Participant 2, describing how his family was saved by a tree in his village:

I am a survivor of Typhoon Sendong. I was only 8 years old when my father latched our hut to two coconut trees. When the waters got higher, we all climbed the trees—my father, mother and six of us children. I was second to the eldest. We fastened our malongs up the tree, and stayed there overnight. When the waters subsided the next day, we went down, but we realized that our house was no longer there. We had to stay in the evacuation center, at the mosque nearby.

**Landslide buried homes.** Participants 9 and 10 had similar stories of their homes buried because of a landslide that happened during Typhoon Sendong. Their homes were located in a village upstream of the river. Here is Participant 9's story:

Our house was buried by a landslide when Typhoon Sendong came. It was built beside a high mountain with steep slope and the presence of boulders. It is a good thing that no one was hurt. We stayed in our neighbor's house but now, we are relocated in a shelter in a neighboring barangay, which is safe to live in.

**Huge logs seen in the river.** Participants 11, 12, 13 and 14 saw logs floating in the river and hitting people and homes. Two of the participants were from the upstream villages, one from a midstream village, and one from a downstream village where the mouth of the Mandulog River is located. Participant 14 described what he saw and offered some explanation for it in these words:

I saw logs in the river, plenty of them. Usually, the loggers deposit the logs in the log ponds in the upper stream of the river, and carry them to International Forum

the mouth of the river downstream. When the rivers overflowed, the logs rolled over the villages downstream, and carried people and their homes to the sea. Even concrete homes and buildings were not spared. It was terrible!

**Drought destroyed the crops.** Participant 15 shared a story of an experience of drought in Maranding, Lanao del Norte, a neighboring place of Iligan City. She described how their crops were affected by drought in her story below:

My father is a farmer and we grow rice in Lanao del Norte. Farmers suffer from climate change, because when there is excessive rainfall and floods, our crops are affected. If it does not rain for a long period of time, and there is drought, our crops are also destroyed. Extreme weather conditions are not good. I am greatly affected in my schooling, for we can't afford to pay for my tuition fees when our crops are destroyed.

In answering Q3: "What activities on climate change did the audience participate in as a result of their learnings and challenges received from the concert?" the following themes emerged: vulnerability assessment, river-banking stabilization, mangrove planting, and solid waste management.

**Vulnerability assessment.** Participant 12 from the community of San Roque was involved in a vulnerability assessment activity, where he was among the members of the community asked to participate in a reconnaissance project needed in providing housing units for people who lost their homes to Typhoon Sendong. Here is his story:

Our community in San Roque is engaged in a participatory action research in conducting vulnerability assessment with the use of an Android device. We were trained on how to use the android device in conducting the vulnerability assessment, and in identifying affected families every time there are floods or droughts. A funding agency is donating houses for us because we lost our homes and other properties to Typhoon Sendong. Our data is ready and we will soon be given homes.

**River-banking stabilization.** The major cause of the disaster during the occurrence of Typhoon Sendong was the flooding of the rivers. The rivers overflowed their banks, and heavy flooding occurred in Iligan City that killed more than a thousand residents. Participant 13 describes his activity in responding to the call for mitigation for climate change in her story:

Our community in Pugaan is located along the riverbanks. Many of our homes were washed away during the occurrence of Typhoon Sendong, so our barangay decided on a river-banking stabilization project, where we are to plant bamboos along the riverbanks to prevent the river from overflowing its banks. I am involved in this project and I feel good to be part of this activity.

**Mangrove planting.** Tree-planting is among the projects identified to mitigate floods. The presence of logs in floodwaters was an indication of deforestation through illegal logging activities. The sea also needs trees, particularly mangroves, to provide sanctuaries for fish and sea shells, and at the same time to help in preventing tsunamis. The majority of the participants indicated that they were involved in tree-planting activities. Participant 14 was involved in a mangrove-planting project which he described in these words:

I am involved in a mangrove-planting project of the school, with the aim of planting mangroves along the seaside of Iligan City. I have chosen the seaside of Bayug, since I am from that place. The mangroves in Bayug were all destroyed by people. I believe that many could have been saved if the mangroves were not destroyed. People were carried by floods from the river to the sea during typhoon Sendong.

**Solid waste management.** Four of the participants were involved in the solid waste management project of the school, and four others were involved in the community. Participant 15 described his involvement of solid waste management project in the Barangay where he belongs:

I am involved in the solid waste management project of Barangay Palao. Our barangay planned to construct the Barangay Material Recovery Facility, which requires some engineering work. Since the project hasn't been done yet, we introduced an alternative method of composting at home, by creating backyard composting pits that could later be used as organic fertilizers for our plants. Now, our homes are practicing this method of managing our waste. We also introduced to the community recyclable materials that could augment one's income by selling the finished products.

In answering Research Question 1, the participants revealed that the Kapagintaw Ethno-Rock Band evoked emotions from them that deepened their understanding of climate change. They were emotional as they watched and actively participated in the concerts, by singing along, dancing along, and by watching the video clippings, listening to the power-point presentations, and by answering questions on climate change. They liked the style used in the concert because it was interactive in nature. By fusing ethnic and western type of musical instruments in accompanying their songs and dances, their audience enjoyed the fusion when they sang and danced along with the performing group. The audience was able to relate and they responded naturally to the fusion of both traditions. The mixed media used in advocating for climate change was very effective because the learnings on climate change were enhanced.

In answering Research Question 2, the participants were able to relate with the concert because all of them had experienced devastation caused by environmental degradation. Further, these experiences motivated them to do something for the

environment. The view that direct exposure to a disastrous event enriches and awakens one's disaster consciousness as stated by Viloria et al. (2014) was confirmed in this study.

In answering Research Question 3, it could be seen that the participants were actively engaged in projects concerning the environment. One of them was involved in a participatory action research, wherein they went around the community to conduct a vulnerability assessment with the use of Global Positioning System (GPS). Another participant joined a barangay that had a project on river-banking stabilization by planting bamboo trees along the riverbanks. One participant joined in the tree-planting project, particularly, mangrove planting in Bayug, where she planted mangroves near the sea. One participant was engaged in solid waste management, where they introduced backyard composting, and recycling of waste materials. The findings of Munoz and Sommers (2011) were also confirmed in this study: art is effective in shaping public opinion on climate change and can mobilize people for action, because it can help connect with people at the belief system and emotional levels.

#### Conclusion

This paper explored how the Kapagintaw Ethno-Rock Band influenced its audience to participate in activities to mitigate the bad effects of climate change. Through lecture concerts on climate change, the participants were motivated to get involved in various activities to address the effects of climate change. Results of this study revealed that the arts can evoke emotions that could lead people action on climate change. This is consistent with the theories of Duxbury (2010) and Hollo and Rimmer (2014) suggesting that artists can engage their audience in emotional and cognitive ways; thus, influencing and affecting their behavior. The Kapagintaw Ethno-Rock Band effectively engaged their audience to become climate activists by the songs they sang, and by their interactive style of asking the audience to participate actively in the concert. The audience was able to relate to the Ethno-Rock Band as people sang and danced together and at the same time learned together about climate change in a pleasant way.

It is recommended that more research should be done on climate change and the arts, to promote the arts, to make people aware of the effects of climate change, and to convince people to become environmental activists.

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