The Climate Change Issues Information Blackboard in the Philippines towards Building Empowered Citizens

Atty. Alex B. Nepomuceno Agnes Jacob-Nepomuceno, Ed.D. Bicol University Legazpi City 4500 Philippines

Climate change is a change in the statistical distribution of weather patterns when that change lasts for an extended period of time. Climate change may refer to a change in average weather conditions, or in the time variation of weather around longer-term average conditions (i.e., more or fewer extreme weather events). Climate change is caused by factors such as biotic processes, variations in solar radiation received by Earth, plate tectonics, and volcanic eruptions. Certain human activities have also been identified as significant causes of recent climate change, often referred to as "global warming". (http://www.globalclimate.info/).

In the Philippines, among the vulnerable to climate change is the place of Albay, a province located along the eastern coast of the country, facing the Philippine Sea and the Pacific Ocean. With a land area of 2, 552 square kilometres, it is considered the second largest in the Bicol Region. Aside from being the second largest province in the region, Albay is also known as the "Vatican of Disasters" of the Philippines. Various natural phenomena such as typhoons, landslides, volcanic eruptions, and tsunamis have plagued the area. As a result, the people of Albay have been vulnerable to persistent poverty, low economic income, and climatic and geological hazards. Recognizing these various problems, the provincial government of Albay has come up with a strategy in response to the challenges. Focused on reducing the disaster risk and vulnerability of the province, Albay's adaptation strategy is guided by the United Nations' Millennium Development Goals (MDGs). By identifying the implications of climate change on the achievement of the MDGs, they were able to include the concerned societal sectors in carrying out the programs and projects.

The provincial government, along with the different City Councils in Albay, created and ordained policies regarding Disaster Risk Reduction and Management (DRRM). Institutions, like the Center for Initiatives on Research and Climate Action (CIRCA), were established to handle matters of climate change adaptation and mitigation. To support their programs and projects further, partnerships with different institutions, such as the Philippine Atmospheric, Geophysical and Astronomical Services Administration (PAGASA) and the University of the Philippines Los Baños (UPLB), were nurtured.

On Risk Reduction Practices, as Albay's programs were based on the MDGs, an integrated approach to DRRM is being undertaken. Focus shifted from physical capital formation to human capital formation. The following are some of the risk reduction practices employed in the province. On Land Use Plan, Zoning, and Risk Mapping, as their first line of defense against disaster, Albay incorporated science-based adaptation practices in their strategy. A Comprehensive Land Use Plan (CLUP), which includes the use of SimCLIM, was created. SimCLIM, a computer modelling system customized for the province, helps in predicting the effects of climate change in the area. The CLUP integrated climate and disaster risks in Albay into zoning ordinances. Furthermore, risk mapping was conducted to show the projected geographical extent of hazards and risks, such as earthquakes, volcanic eruptions, typhoons, temperature increase, and rainfall increase.

Based on the land use plan, zoning, and risk mapping done, Albay crafted geostrategic intervention strategy, which is the main disaster risk reduction strategy of the province. As the hazard-prone areas were identified, the government was able to redirect the centers of business and residential activities towards safer locations. Also included in the said strategy is the relocation of more than 10,000 households in high-risk areas, the on-going building of an international airport, road networks, and a new government center. Different government institutions and non-government organizations provide financial support for the projects. This aspect is considered to have the biggest gap in the CCA program. Projects that need to be done include: flood control for flood plains, watershed protection and reforestation, and irrigation rehabilitation.

A large source of funds for these engineering interventions comes from World Bank's country assistance program with its non-government counterpart. Along Social Preparations, infrastructure and other technologies are not the only ones that need to be climate-, and disaster-proof. Preparedness of the people in Albay also needs to be ensured. With this, social preparation programs are being undertaken in the province. This includes continuous training and education on dealing with climate change and other different disasters. Household, community, and local government unit (LGU) preparedness are targeted. Trainings in different areas, like evacuation and community kitchen management, mountain survival and compass reading, and community risk mapping and contingency planning, are periodically held for the citizens. Local broadcast media are also used for Education-on-Air programs on climate change. Aside from the trainings and seminars, community drills are also held. Through games and magic shows, children are taught of DRR and its importance.

In addition, the government also closely coordinates with agencies such as PAGASA. To aid with the detection of hazards, a well-equipped Regional Weather Bureau was established in Legazpi, Albay. Furthermore, community-based warning systems, which highlight rainfall monitoring, were set up in villages. The government also established a warning communications protocol wherein 15,750 SIM cards were distributed to village officials.

An Infoboard for sending important messages and receiving distress calls from barangays was created as part of this communications protocol. On Capacity Build-up and Disaster Response, the province has mobility assets, such as ambulances, rubber boats, passenger trucks, helicopters, and fire trucks that could evacuate 160,000 people per day if needed. The LGUs, provincial government, national agencies, and private organizations supplied these vehicles. Albay's disaster response program targets pre-emptive evacuation—the province's key response mechanism to achieve its zero casualty goal. Based on the gravity and proximity of the risk, the government calls for evacuation of the citizens. Protocols for evacuation are well established, and a ready budget for calamities is maintained. Emergency evacuation centers were constructed as multi-purpose buildings. When there are no disasters, these buildings can operate as either classrooms or municipal activity centers in selected cities. For Mayon Volcano disaster areas, centers which could double as schools were put up. Furthermore, the schools in the area, which are also used as evacuation centers, underwent a validation survey in order to determine their structural safety (in terms of design), safety from hazards (in terms of location), and health safety. Seven hundred school buildings were further provided with water-sanitation facilities.

The risk reduction strategies and practices of Albay have been effective in securing the province's 'zero casualty' status for 16 years until the year 2011. Private investments surged, and the province was acknowledged to have the fastest growth among the other provinces in the same region. Furthermore, they were also able to accomplish the MDGs ahead of the target year, 2015. In addition, two national laws on DRR and CCA, namely Republic Act (RA) 10121 or "The Philippine Disaster Risk Reduction and Management Act of 2010" and RA 9729 or "The Climate Change Act of 2009" were enacted based on the Albay model. With other provinces challenged by the impacts of climate change, the different measures used by Albay in disaster risk management and climate change adaptation could be relevant when crafting their own adaptation plans.

(http://climatechange.searca.org/index.php/climate-change-adaptation-knowledge-showcases-5/adaptation-

notes/1243-adapting-to-climate-change-strategies-of-albay-philippines)

Given the well-crafted climate change response by the province of Albay, the study randomly picked climate change issues that were posted in the Facebook Page of the Governor of the province and a case study involving 20 residents in an island barangay (with houses far from one another) of San Pablo in municipality of Bacacay province of Albay was conducted to determine their extent of awareness of the climate change issues. San Pablo belongs to the barangays of the Municipality of Bacacay which is in the outlying area. The municipality of Bacacay has a population of about 61,574 and its 56 barangays belong to the partly urban areas in the Philippines. While some of the barangays developed modern urban structures, some others, especially those which are seated in the outlying areas, remained rural. San Pablo is one such barangay with 1,240 residents. The island folks thrive depending highly on fishing, farming, and other livelihood activities common to the place such as native mat making. San Pablo is prone to risk caused by natural calamities because of its geographic area.

Literature Review

In 2009, President Obama made a pledge that by 2020, America would reduce its greenhouse gas emissions in the range of 17 percent below 2005 levels if all other major economies agreed to limit their emissions as well. Today, the President remains firmly committed to that goal and to building on the progress of his first term to help put us and the world on a sustainable long-term trajectory. Thanks in part to the Administration's success in doubling America's use of wind, solar, and geothermal energy and in establishing the toughest fuel economy standards in our history, we are creating new jobs, building new industries, and reducing dangerous carbon pollution which contributes to climate change. In fact, last year, carbon emissions from the energy sector fell to the lowest level in two decades. At the same time, while there is more work to do, we are more energy secure than at any time in recent history. In 2012, America's net oil imports fell to the lowest level in 20 years and we have become the world's leading producer of natural gas – the cleanest-burning fossil fuel.

The Chinese government attaches great importance to the issue of climate change. In 2011, the Fourth Session of the Eleventh National People's Congress approved the Outline of the 12th Five-Year Plan for National Economic and Social Development, which defines the objectives, tasks and general framework for China's economic and social development during the 12th Five-Year Plan period. The Outline underlines the importance of climate change and integrates measures for addressing it into the country's mid-term and long-term plans for economic and social development. It sets binding targets to reduce energy consumption per unit of GDP by 16 percent, cut CO2 emissions per unit of GDP by 17 percent, and raise the proportion of non-fossil fuels in the overall primary energy mix to 11.4 percent. It defines the objectives, tasks, and policy orientation of China's response to climate change over the next five years and identifies key tasks, including controlling greenhouse gas emissions, adapting to climate change, and strengthening international cooperation.

To fulfill the country's objectives and tasks in addressing climate change during the 12th Five-Year Plan period and promote green and low-carbon development, the State Council has issued a number of important policy documents, including the Work Plan for Controlling Greenhouse Gas Emissions During the 12th Five-Year Plan Period and the Comprehensive Work Plan for Energy Conservation and Emission Reduction During the 12th Five-Year Plan Period, to strengthen planning and guidance in addressing climate change. Relevant departments and local governments have actively addressed climate change and made remarkable progress in this regard. China continues to play a positive and constructive role in international climate change negotiations and pushed for positive outcomes at the Durban Climate Change Conference, thereby making a significant contribution to addressing global climate change. USAID has been investing in actions that help the Agency better understand climate change risks and opportunities and reduce vulnerabilities since 1991. In 2011, USAID created a position of Climate Change Coordinator. In January 2012, the Agency released the USAID Climate Change and Development Strategy: 2012- 2016, which includes a number of actions to integrate climate change adaptation into the Agency's mission, programs, and operations. USAID is also providing adaptation funding to a number of priority adaptation countries to help address climate change vulnerabilities.

In addition to these overarching efforts, USAID has undertaken a number of activities related to Guidance and Training, Pilot Activities, Research and Information, Evaluation and Learning, Partnerships, and Inreach and Outreach. A number of adaptation activities are also underway at the mission level. USAID adaptation planning, implementation, and evaluation will continue to be led by the Agency Global Climate Change Coordinator. To ensure the ongoing achievement of USAID's mission, the Agency will complete in FY2012 an implementation plan to execute the USAID Climate Change and Development Strategy, distribute USAID's Adaptation Plan in FY2013, and annually review and update the Agency Adaptation Plan.

Preparing for Climate Change: A Guidebook for Local, Regional, and State Governments was developed by the Climate Impacts Group and King County, Washington, which is located on Puget Sound. The guidebook is "a roadmap of action for local, regional, and state governments," says Jim Lopez, deputy chief of staff to elected King County Executive Ron Sims. "It enables them to ask the climate question with respect to priority planning areas and initiating a climate resiliency effort. The guidebook was adopted by ICLEI as part of its Climate Resilient Communities program, a NOAA-funded initiative that helps local governments develop tools to protect their communities from the impacts and costs associated with climate change. A sister ICLEI program, Cities for Climate Protection, offers a framework for local governments to reduce greenhouse gas emissions and improve livability.

Research Method

A case study involving 20 respondents served as key informants of the study. They were interviewed face- toface using the prepared research questionnaire as guide, which was couples with direct explanation in order to solicit their responses. Likewise, the Facebook Page of the Governor of the Province of Albay, Philippines was used for content analysis on climate change issues.

Research Objectives

The study is guided by the following objectives:

- 1. To determine the level of awareness on the risks of climate change to the island residents ;
- 2. To identify possible risks caused by climate change to the island barangay and its people:
- a. Sea level rise (coastal area),
- b. Storm surges,
- c. Landslides and Soil Erosion,
- d. Floods,
- e. Erratic droughts, and
- f. Excessive rains;
- 3. To find out their knowledge on Disaster Contingency Plans by the barangay; and
- 4. To know the form of media used by the residents on their climate change awareness

Theoretical Framework

With the advancement of information and communication technology in the world, the issue on digital divide prevails especially in many developing countries such as the Philippines. Given the locale of the study, the classical Hypothermic Needle Theory or Magic Bullet Theory of Harold Laswell (1927) was used which describes that mass media can directly influence a large number of people by disseminating messages to trigger a response. The bullet theory graphically suggests that the message is a bullet; fired from the "media gun" into the viewer's "head."

Results and Discussion

The results of the survey were tabulated for 20 respondents living in San Pablo, Bacacay, Albay. The table below illustrates the distribution of the respondents by age. The ages of the respondents ranged from 15-75.

Table 1

Age			
Age Group	Frequency	Percentage	
15-35	7	35	
36-55	12	60	
56-75	1	5	
Total	20	100%	

Data showed the ages of the respondents that were chosen to consist of the case study respondents. As can be gleaned, about 60 per cent of the respondent belonged to the age group, 36-55, 35 percent are in the 25-35 age group, and 5 per cent are found in the 56-75 category.

Table 1 1

Gender				
Gender	Frequency	Percentage		
Male	6	30		
Female	14	70		
TOTAL	20	100		

Table 1.1 showed the gender of the respondents that have answered the questionnaires. Thirty percent (30%) or six (6) out of the total number of respondents were male and 70% or 14 respondents were female.

Education	Frequency	Percentage
Elementary	1	5
High School	7	35
Post Secondary	4	20
College	8	40
Higher	0	0
Total	20	100

Table 1.2 ducational Backgrour

In terms of educational attainment, only one respondent attained elementary as the higher education, while the rest of the respondents reached High School and College as indicated by 35 per cent and 40 per cent respectively. There is nobody among them who pursued highest post graduate education.

Table 2
Level of Awareness on Climate Change of the Residents in San Pablo

Frequency Aware	Percentage	Frequency Slightly Aware	Percentage	Not Aware	Percentage	Total
6	30	12	60	2	10	20

As shown, only 12 or 60 percent of the respondents were slightly aware of climate change issues. This supports the statement of Mr. Manuel, head of the Research Team of the Center for Initiatives and Research on Climate Change Adaptation (CIRCA) that there is a "need to disseminate information and educate the people, which is paramount to effectively brace us against the potentially and most pervasive and pernicious threats facing Mother Earth. The direct impact to the local communities of the different policies put in place is still to be experienced (top-down approach in climate change adaptation). However, a lot of community participation is expected especially since local policies directly affecting the communities are slowly being put in place.

This finding is also in sync with the findings made during the National Conference on Climate Change Adaptation held in Albay Astrodome on October 22-27, 2007 that there is a lack of information on climate change among the people as quoted in the study of Brizuela and Raj on the Role of the Local Newspapers in Climate Change Adaptation in 2009.

Table 3
Frequency Distribution of Climate Change Phenomenon
Awareness during Calamities

Climate Change Phenomena	Frequency	Percentage
Sea level rise	6	9
Storm surge	7	10
Landslide and soil erosion	14	22
Floods	5	8
Drought	17	26
Excessive Rains	16	25

*Multiple Responses

Table 3 shows the frequency distribution of climate change phenomena associated with calamities that the respondents of this island barangay, San Pablo were aware of. As shown, respondents rated "drought" with 17 or 26 percent of them registered awareness of this phenomenon. Tailing next was "excessive rains" as evidenced by 16 or 25 per cent of the case study respondents who said that they are aware of this climate change phenomenon as against "sea level rise" which obtained the lowest rating of 6 or 9 per cent. This result interestingly runs contrary to the fact that the respondents live in an island surrounded by sea.

To address this information need on Climate Change issues, however, the Albay government worked closely with the education sector to fill in and narrow the information gap as shown in this Facebook Page: Joey Sarte Salceda Official Facebook Page

June 18, 2013



Table 4. Frequency Distribution of Risks Caused by Chinate Change			
Risks Caused by Climate Change	Frequency	Rank	
Sources of drinking water are damaged	16	2.5	
Formation of strong storms and typhoons	19	1	
Powerful storm surges are experienced during typhoons	11	6	
Coastal communities and coastlines are submerged underwater	5	7	
Damage to marine wealth will affect the livelihood of the coastal areas	13	5	
Children and elderly will be more prone to diseases	16	2.5	
Spread of diseases like leptospirosis	15	4	
TOTAL	95		

Table 4: Frequency Distribution of Risks Caused by Climate Change

Table 4 shows the awareness of the respondents on the risks brought by climate change particularly in their island. As revealed, the key informants were aware of the formation of strong typhoons garnering the top place or rank 1 among other risks as indicated. Ironically, the same result shows that the people although live by the island surrounded by sea, they are not aware of the risk of coastal communities and coastlines to submerge in water.

This finding shows that despite of the launching of the Albay government of the project Albay in Action on Climate Change (A2C2) on August 7, 2007 still its constituents specifically the island folks are not yet fully aware of the risks that may be caused by Climate Change. This result is likewise in agreement with the editorial paper dated August 7, 2007 as cited by the study of Brizulea and Raj, arguing the need for grassroot orientation and education which should be the focus of climate change advocates.

Table 5
Contingency Plans in Times of Calamitie

Awareness on Calamity Contingency	Frequency	Percentage		
Plans				
Yes	4	20		
No	16	80		

On awareness about contingency plan of the island barangay, the result shows that 16 or 80 percent of the island folk are not aware of the existence of any contingency measure in times of calamities, while only few, 4 or 20 per cent of the key informants were aware of the existence of disaster response. This contingency plan basically involves evacuation of residents to higher areas and suspension of classes during heavy rains. In an interview, only one key informant said that they were informed by their barangay officials about the climate change and its impact. However, the other 18 informant said that they were not informed. Keeping the citizens informed is crucial in saving lives especially at the face of a calamity and other forms of disaster brought about by climate change. "Information serves as indicators valuable for policy analysis which allows the prediction of developing crisis and need to initiate action either to prevent them or contain either effect. The task of this kind of analysis should not be the responsibility of one person alone since accuracy is considerably enhanced through the assimilation, experiences, and skills from widest possible range of sources. Among these are leaders, local populations, journalists, and newspapers. (National Disaster Coordinating Handbook, 2003).

This result, however, poses a challenge to the government of Albay to ensure that all corners of the province and its people are reach by all activities related to Climate Change Adaptation and Mitigation. More so, with Albay taking an active role in the addressing this world issue and concern as evidenced by this Facebook information. Joey Sarte Salceda Official Facebook Page

<section-header><section-header>

Solution <u>Joey Sarte Salceda</u> <u>August 24, 2012</u>. PRESS RELEASE Manila Office of Albay Governor Joey Salceda August 24, 2012

The Board of the Green Climate Fund kicks off its work, elects two Co-Chairs and Gov. Salceda of Albay in the Board (Geneva, 24August 2012) – The Board of the Green Climate Fund (GCF) started its first meeting after successfully filling all Board seats, equally represented by members from the developing and developed countries. Sitting for the Developing country, Albay Governor Joey Salceda, whose Province is frequently visited by typhoon, shares seat with the other regional representatives from Africa, Asian-Pacific, Latin America and the Carribean, Least Developed Countries, Small Island Developing States, Australia and New Zealand, Denmark and Netherlands, France, Germany, Japan, Norway and Czech Republic, Poland and Hungary, Spain and Italy, Russian Federation and Switzerland, Sweden and Belgium, UK and Northern Ireland; and USA.

The Green Climate Fund is governed and supervised by a 24-member Board and was designated as an operating entity of the financial mechanism of the UNFCCC. The Board will address several key issues, including initiating work towards the operationalization of the Fund of about 100 Billion dollars and work on the selection of the host country of the Fund. The Board governs and supervises the Fund, taking full responsibility for funding decisions. In his statement on the first day of the meeting, Gov. Salceda emphasized that he has trust to the system and selection process of the host country and suggested to the Board to look into first the "How" and not on the "Who" in the selection of the host of fund. Six countries made offers to become the host of the Fund – Germany, Mexico, Namibia, Poland, Republic of Korea, and Switzerland.

The Board began by electing Mr. Zaheer Fakir of South Africa who was earlier nominated by Gov. Salceda during the informal meeting of the Members from the developing country, and Mr. Ewen McDonald of Australia as its Co-Chairs for one year. Mr. Fakir is Head, International Relations, and Governance of the Department of Environmental Affairs of South Africa. Mr. McDonald is Deputy Director General of the Australian Agency for International Development (AusAID). The Green Climate Fund was established in December 2011 at Durban, South Africa, by the Conference of the Parties to the UNFCCC with the purpose of making a significant and ambitious contribution to the global efforts towards attaining the goals set by the international community to combat climate change. In the context of sustainable development, the Fund will promote the paradigm shift towards low-emission and climate-resilient development pathways by providing support to developing countries to limit or reduce their greenhouse gas emissions and to adapt to the impacts of climate change. The Fund will provide simplified and improved access to climate change funding to developing countries, including direct access, basing its activities on a country driven approach.

<u>LikeLike</u> · · <u>Share</u>

Table 6
Media Forms Used in Awareness of Climate Change Issues

Media Forms	Frequency	Percentage
Radio	15	75
Television	2	10
Newspaper	2	10
Internet	1	5

As shown in the result, among the available information channels on climate change issues, radio remains to be on top of the list as evidenced by 15 of the key informant or 75 percent who relied on this traditional information medium compared to others channels which tailed down below. This is because of the geographical location of the locale, an island basically surrounded by sea, and considerably far from the mainland municipality where it is a part of. In addition, the electric supply has been not restored yet after the recent typhoon that hit the province of Albay in July 2014. Thus, the practicality of using radio in times of calamity is already time-tested.

Fang stated in his book, *History of Mass Communication Six Information Revolution* that as a source of information, radio has been universally powerful. This could actually attributed to the fact that radio is very much accessible, being one of the fastest means of communication, can be used even without the presence of electricity, and has the ability to report events as it happen that is why radio is truly been globally powerful. (Fang, 1997).

The reliance on radio by people in the Philippines as a developing country is backed up also by a recent study on the use of radio as advocacy platform in the program, The *WE-Mens'* Forum, was initially conceived at addressing issues concerning women particularly in Bicol region, guided by implementers' noble aim of contributing to the attainment of gender equality by 2015, being one of the pressing issues challenging the world, among others, "*Promote gender equality and empower women between 2005 and 2015*. After a year of airing, this impact study affirmed the power of radio as a source of information on societal issues. (Nepomuceno, 2013)

In addition, radio is saturation medium in the Philippines, and the only saturation medium in the whole Asia. According to Lucas, there is no Filipino who cannot get a transistor radio and for the people in the mountains and rural areas, radio is their only window on the world. (Lucas, 1999). On the other hand, it is interesting to note that Internet has already started to be used as an information source on climate change issues as indicated by one or 5 percent key informant referring to this new media. This means that the use of the Facebook by the local government in disseminating issues on climate change has also penetrated distant places such as the island of San Pablo. In the Philippines, the number of Internet users is estimated to have reached 2 million Filipinos according to the report of the Philippine Chapter on the Business Software Alliance. (http://www.acnieldsen.com)

Thus, the use of Facebook has become a common social activity today among people in different spheres of life, be it in the government, church, school and even in marketplace among ordinary people. Hence, as in the case of the provincial government of Albay, the use of Facebook by its leaders is the best instantaneous and fastest mode of reaching out to their constituents; thus kept the people in the know about emergency advisories to guide their day-to-day activities. This is in keeping with the Zero Casualty policy instituted in the province to safeguard the welfare of thousands of residents. The Albayanos turn to the Facebook page of the governor to follow his posts especially along information on impending climate change disasters such as the threat of volcanic eruption of the famous, Mayon Volcano.

Therefore, the triad for democracy works well with the Philippines as a democratic country, wherein the government, news media, and the citizen form the necessary triad. Democracy can truly work only with active, informed citizens who have reason to trust the information that they can get from the government and the information that they can get from the new media. (http://www.pipa.org/whatsnew/html/new 60403.html.)



This Facebook page, pertained to an information guide about the conduct of evacuation activity, GO KIT / EVACUATION KIT, posted on August 28, 2011 at 7:36am. The GO KIT or EVACUATION KIT is made up of necessary things you need in case of an emergency whether you ne to shelter in place of to bug out (evacuate). The idea is to have everything in one pack that can be easily carried and stowed. While we cannot really put in the pack nor bring everything, only necessary for survival. The size of the pack or the amount of things inside the pack will be determined by the end user. For example, having an infant in the family will require an infant formula, diapers, vitamins, etc. Likewise, having an elderly, the pack kit will have medications, adult diapers (if being used), etc. What we will be listing here are the minimum requirements that should be in your GO KIT. Depending on your personal needs and family size, you may adjust as needed. The GO KIT can also used even if you will not evacuate; i.e. to centralize emergency equipment in one pack or plastic container avoiding looking for things when we need them most urgently. Lastly, let everyone in the family get involved; let them understand the contents of the kit and how to use them. Here is the minimum list divided according to use: On LIGHTING; Flashlight with extra batteries and bulb (LED lights use less power, thus longer battery life); Candles with lighter and matches placed in a waterproof container; Improvised torch - using liquid fuel kerosene or gas (when using naked light, always keep watch, DO NOT LEAVE THEM UNATTENDED); WATER- Main water container - it is a good idea to have several small collapsible water container. Not only it is easier to carry, it will prevent losing all your valuable water in case it gets punctured. Water bottles - for drinking or mixing drinks (milk, coffee, juice). Water purification - there are several small and compact water filters available in the market sold by outdoor stores popular brands include MSR and PUR; PURITABS or other tablet based disinfectant is also useful-just follow recommended dosages and instructions. FOOD- include foods that needs less or no cooking and needs no or less water when being cooked; Non perishable food - canned goods; Dried fish. Rice-Margarine-can be used as sandwich spread and cooking oil

Sandwich spread-sweets are good source of energy. Bread- UTENSILS COOKING IMPLEMENTS: Plate with spoon and fork; small cooking pots; small butane container gas stoves (gasolito, superkalan); FIRST AID KIT-Medicine for personal needs (for elderly, infants and other illnesses). Medicine for common ailments (paracetamol-for pain and fever, diatabs, etc.); Bandages, Gauze Bandages, Alcohol, Betadine, add things you may need...CLOTHING-Rain jacket; thick clothing for cold temperature; blanket or sleeping bag; OTHERS-small battery operated radio with extra batteries to listen for advisories or announcements from PDRRMC Extra battery for you cell phone-fully charged.



Albay execs issue new Mayon warning

Volcano this week.

SHARES. <u>LikeLike</u>· <u>Share</u> Bottom of Form

Joey Sarte Salceda September 24 at 4:12am · ShareThis · Embrace Mayon - give her her

Authorities issued anew yesterday warnings of a high probability of eruption of Mayon

LINK: http://www.philstar.com/headlines/2014/09/24/1372581/albay-execs-issue-new-

space #MayonPH



<u>mayon-warning</u>

The Philippine Institute of Volcanology and Seismology (Phivolcs) regional office warned of a worst-case scenario. A new picture of the lava dome with a collapsed crater wall facing Legazpi City was observed during an aerial survey yesterday.

The lava dome, pushed upward to the crater floor due to the continued pressure from the magma chamber underneath, was first seen on Aug. 12. "With the aerial survey we have seen the lava dome as a whole," Phivolcs regional chief Ed Laguerta said.



Facebook nowadays has become the most immediate information source by many as supported also by a recent study that determined the messages and themes about the Facebook campaign on its More Fun in the Philippines. It was shown that the study participants' main source of information about the IMFP Facebook campaign were the Internet through social networking sites such as Facebook and Twitter, online news, blogs; newspaper and television. The participants identified themselves as "Filipino Ambassadors" and viewed the campaign as something that provides Filipinos a sense f ownership, credibility, accountability, changing mindsets, fun in discovery, and positivity.

Conclusions

Based on the afforested findings, the following conclusions are drawn:

- 1. The Use of Facebook by the Government of Albay, Philippines is responsive to the immediate information needs of its constituents particularly those with access to the Internet, to be informed of climate change issues, programs, activities that are being undertaken and institutionalized by the government in attaining Zero Casualty in times of disasters and other calamities that frequently visit the province.
- 2. The Albayanos through the use of Facebook and other information platforms by the government of Albay, Philippines are kept informed and empowered on how to deal with emergency situations such as during typhoons, volcanic activities, and other natural calamities.
- 3. The Albayanos especially those at the far-flung barangays still heavily rely on radio for information on climate change.
- 4. That disaster contingency measures need to be widely disseminated to the constituents for them to be automatically conscious of specific actions to take in the face of emergency situations.
- 5. The local folks have considerable amount of knowledge on Climate Change issues, risks, adaptation, and response.
- 6. The rural communities such as the island barangay of San Pablo in the municipality of Bacacay, province of Albay are vulnerable to climate change impacts.

Recommendations

In view of the findings and conclusions, the following recommendations are advanced:

- 1. The local government of the province of Albay should optimize the use of the power of radio in disseminating climate change issues, information, and other related activities to keep the rural communities prepared in dealing with calamities both natural and man-made.
- 2. Intensive information campaign should be launched by the government of the province of Albay in the Philippines specifically in far-flung barangays/communities who are at risk and are vulnerable to climate change impacts.
- 3. The local officials who are in direct contact with their constituents should hold barangay assembly for widest information dissemination of emergency measures that need to be undertaken when disasters, calamities occur and other information that they need to have should be made available for emergency empowerment.
- 4. Climate Change information, education, and communication (IEC) materials should be distributed to the residents for building their knowledge on the issues that are brought about by the phenomenon;
- 5. Given proper information and knowledge, residents will become resilient themselves in dealing with the effects of Climate Change.
- 6. The government- and-school relationship should be continued, monitored, assessed to ensure that climate change topics are integrated in the school curriculum.

- 7. The provincial government of Albay should monitor the implementation of policies down the grassroots level to ensure that programs are properly implemented and miscommunication can be avoided within the communities.
- 8. The voice of the disadvantage, the poor, vulnerable to climate change impacts should be of prime importance. Hence, a Feedback Mechanism tool should be institutionalized to provide communication space for comments, suggestions, recommendations to successfully implement Disaster Response and Mitigation programs to save lives and be assured of Zero Casualty among the Albayanos.

Bibliography

http://www.ensaa.eu/index.php/climate-change/97-defining-climate-change.html

- http://climatechange.searca.org/index.php/climate-change-adaptation-knowledge-showcases-5/adaptation
 - notes/1243-adapting-to-climate-change-strategies-of-albay-philippines)
- Fang I.E. (1997). A history of mass communication, six information revolutions. Massachusetts:Butterworth-Heinemann.
- http://www.globalissues.org/article/233/climate-change-and-global-warmingintroduction#WhataretheimpactsofGlobalWarming October 6, 2014
- http://www.globalissues.org/article/233/climate-change-and-global-warming
 - introduction # What are the impacts of Global Warming
- http://www.globalissues.org/article/233/climate-change-and-global-warmingintroduction#WhataretheimpactsofGlobalWarming
- The President's Climate Action Plan. Executive Office of the President. June 2013. Page 4 Retrieved from www.whitehouse.gov/sites/default/.../president27sclimateactionplan.pdf October 6, 2014
- China's Policies and Actions in Addressing Climate Change. The National Development and Reform Commission. The People's Republic of China 2012. Page 3 Retrieved from

www.ccchina.gov.cn/WebSite/CCChina/UpFile/File1324.pdf October 6, 2014

USAID Climate Change Adaptation Plan. June 2012. Page 3 Retrieved from www.usaid.gov/.../Agency%20Climate%20Change%20Adaptation%20pdf

- Local Strategies for Addressing Climate Change. NOAA Coastal Services Center. pages 2-3. Retrieved from www.csc.noaa.gov/magazine/climatechangestrategies.pdf October 6, 2014
- Lucas. F.B. (1999) Taking hold of the Rural radio: A handbook in community-based radio broadcasting: Bayanihan Broadcasting Corporation, Foundation for the Philippine Environment
- Villa. S.A. (2013). Messages and themes emerging from stories of selected participants about the facebook campaign on its more fun in the Philippines, International research conference in higher education, Book of abstract.