



Leading the Way in *“Educating to Build Resilient Communities”*

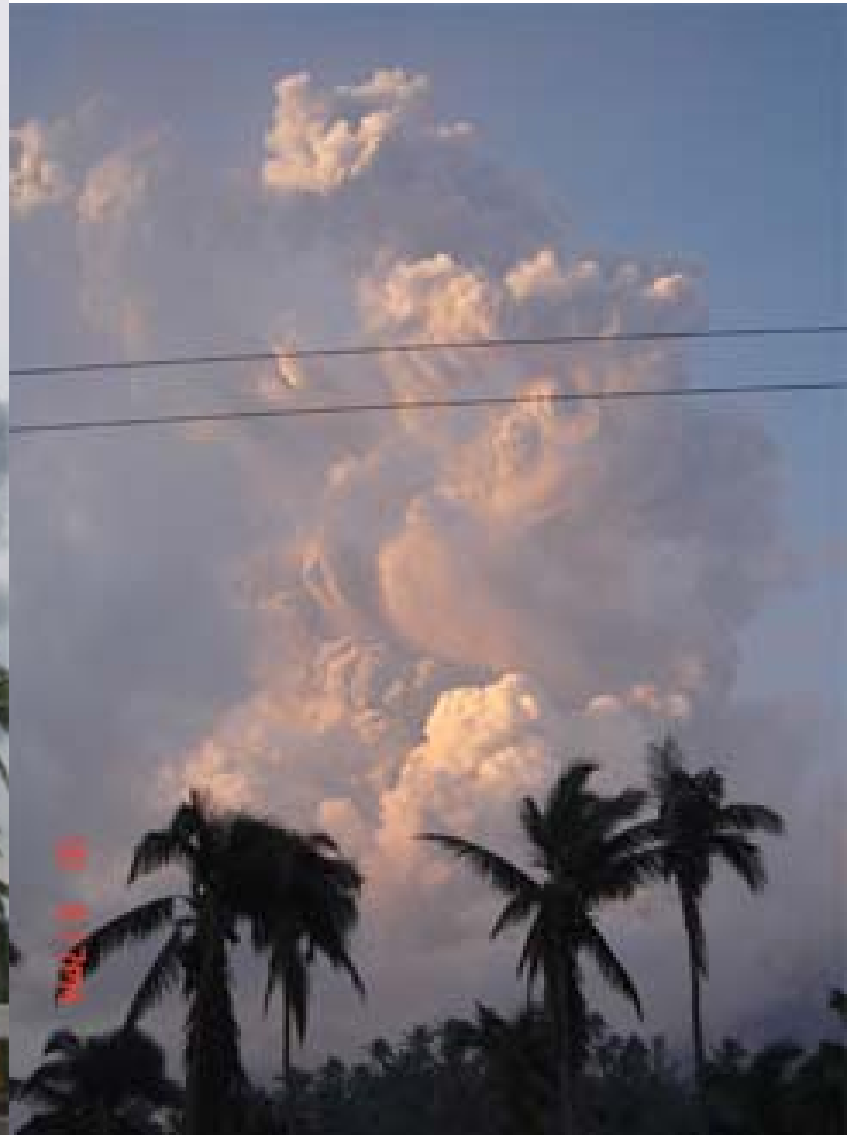


DR. LEILANI DIAZ-PAVILANDO
Director of Bicol University Extension Service Center

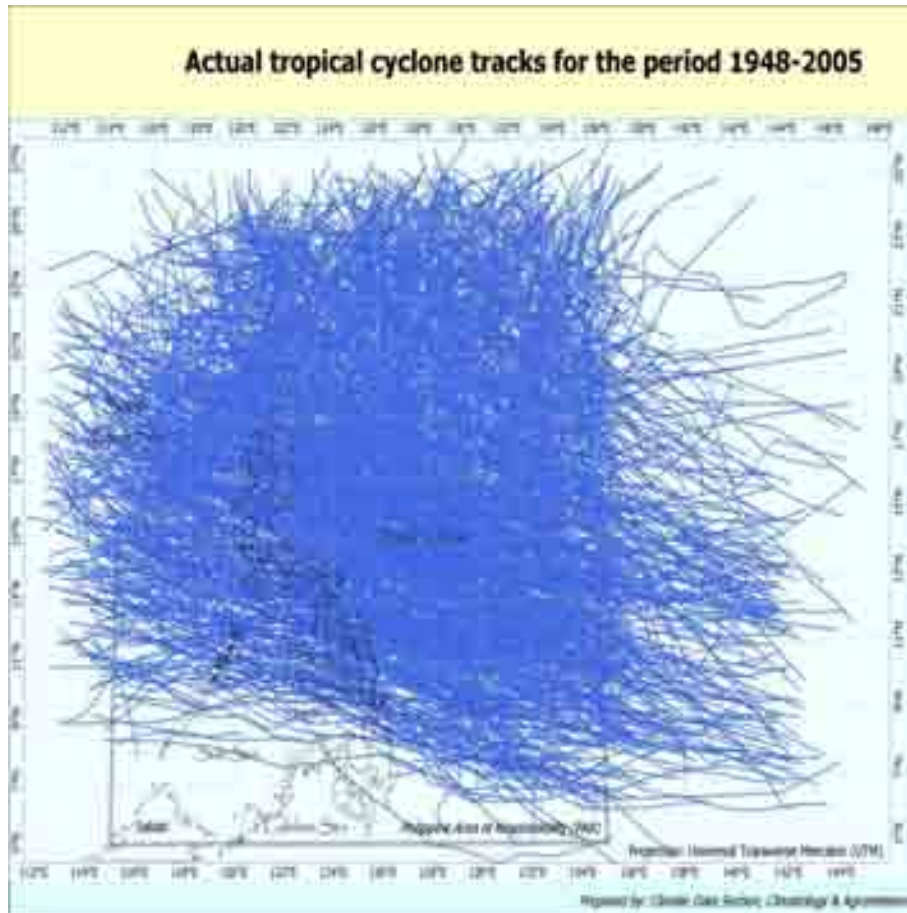
What will you do if you have a volcano in your backyard?



Ash Explosions



When you are amidst these challenges!!



Flash Floods



SLOW GOING:
Soldiers carrying relief goods piled through muddy road in Real; satellite photo shows "Yoyong" blanketing Luzon; projected track of super-typhoon.



Strong winds toppled electric wires & trees



Coastal inundation due to storm surge

Typhoon2000.com Image Archives

13. Typhoon MILENYO (Xangsane)

– September 27, 2006 (2PM Manila Time / 06 GMT)



Bicol Region is usually affected by tropical storms and cyclones (3 TCs in a year), thunderstorms, monsoon rains (SW & NE) and ITCZ passing through the region

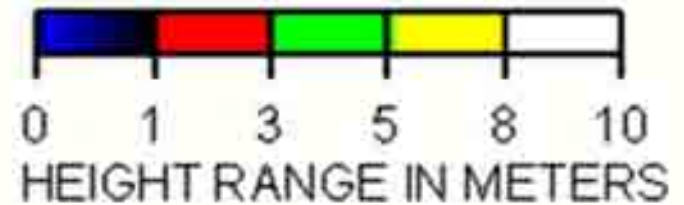
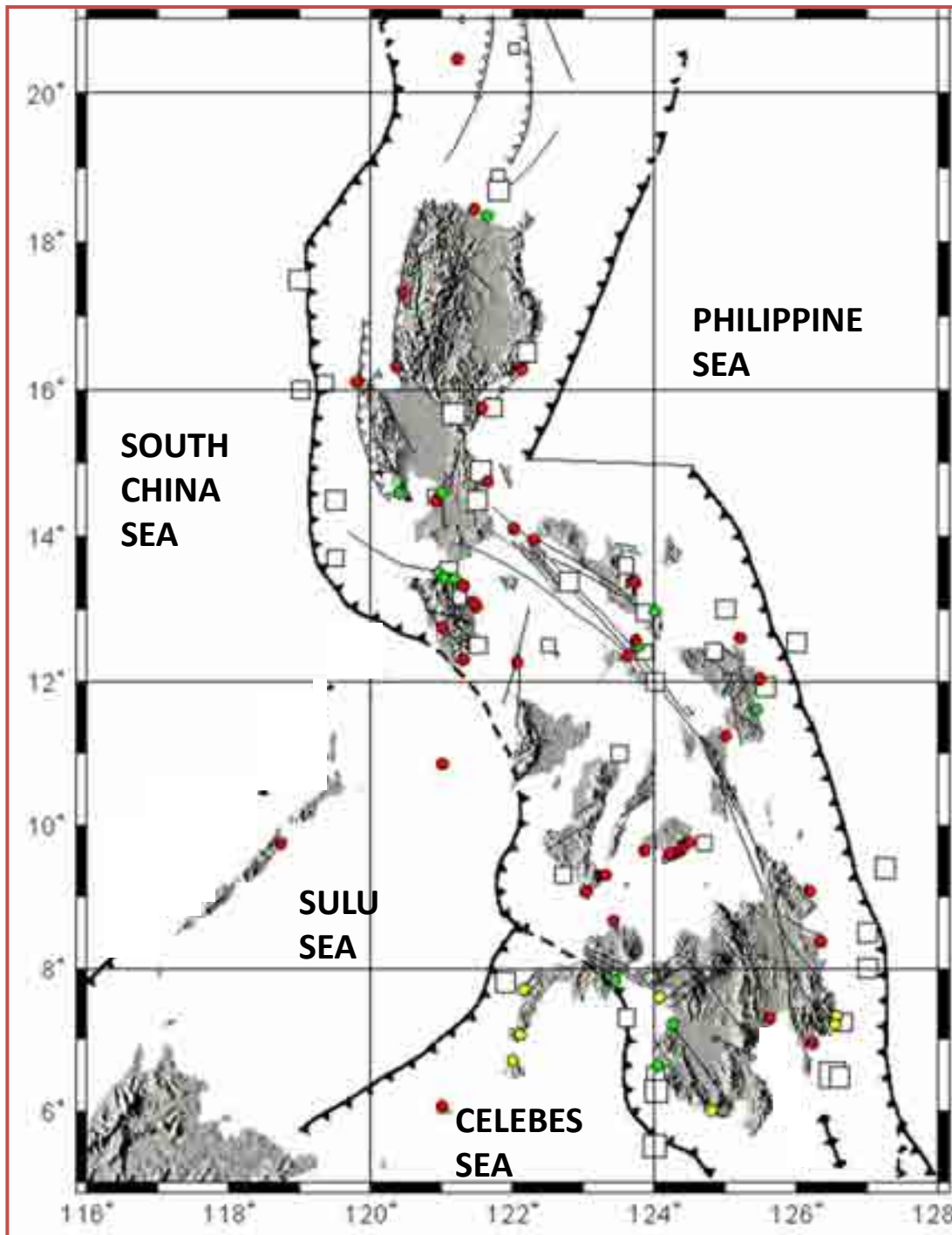
PHILIPPINE DESTRUCTIVE EARTHQUAKES



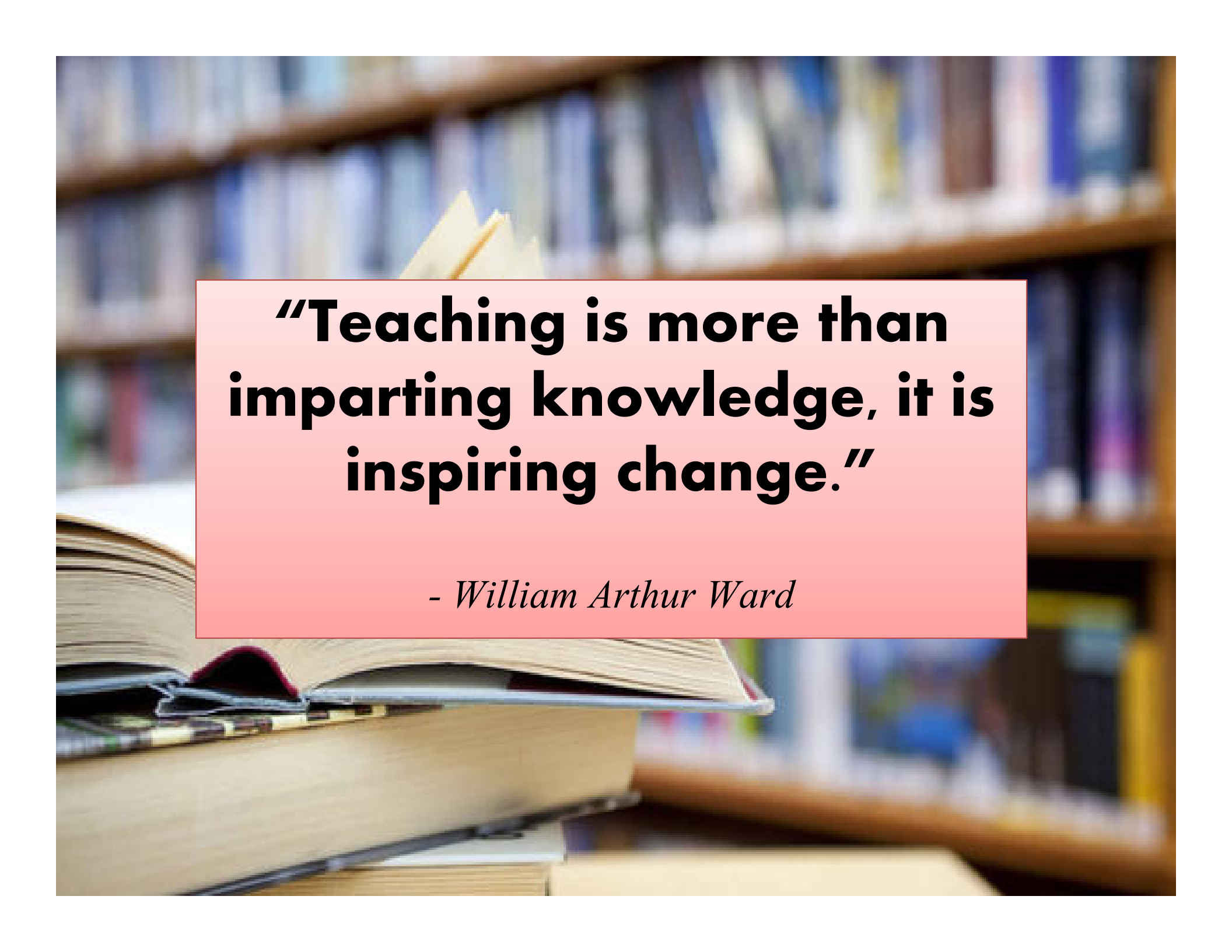
Date: July 7, 1954
Epicenter: Bacon,
Sorsogon
Magnitude: 6.7
Casualty: 13
Injured: 101

Tsunami-Affected Areas in the Philippines

(~40 tsunamis for past 400 yrs)



- Epicenter of tsunamigenic earthquake



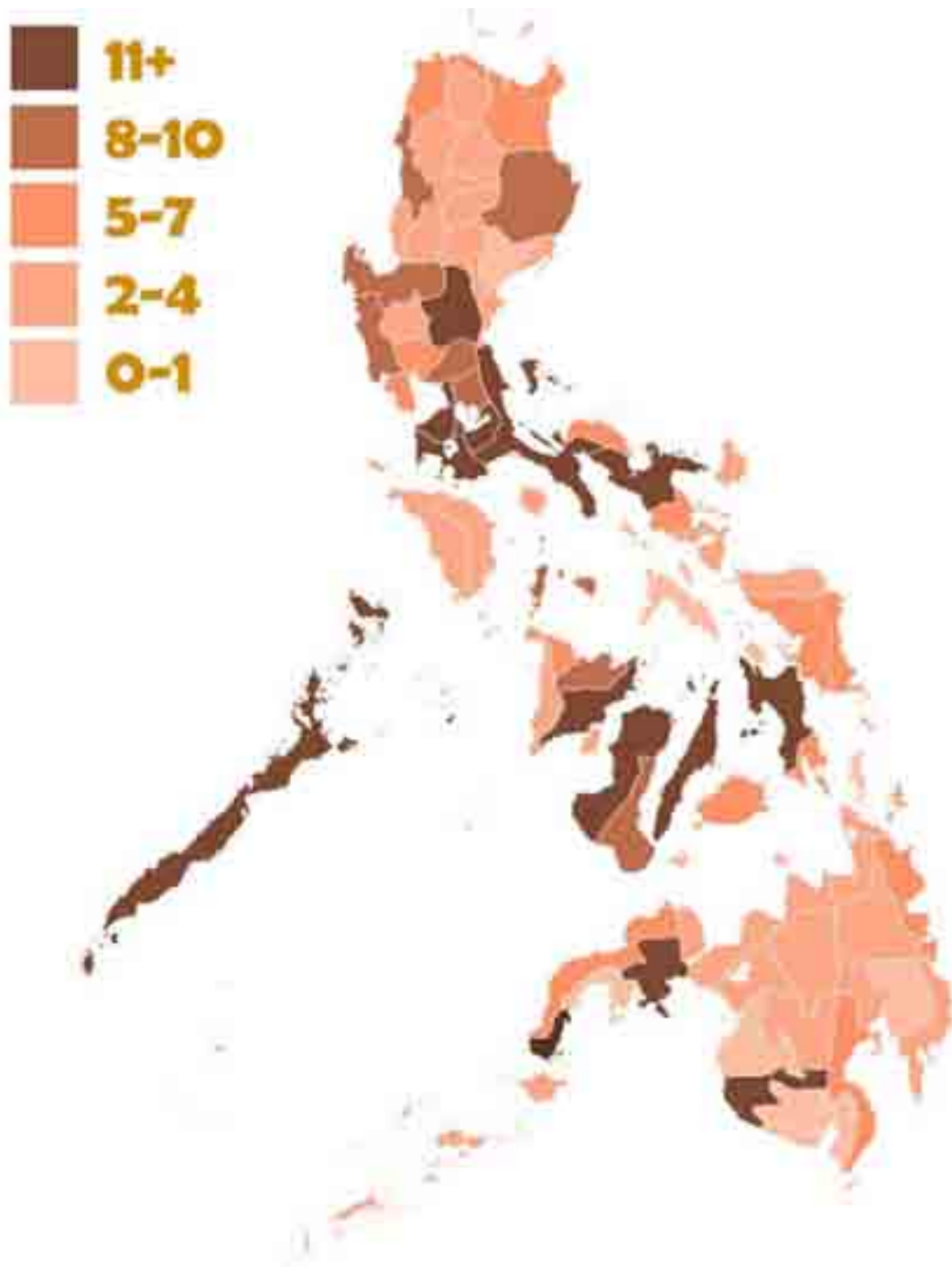
**“Teaching is more than
imparting knowledge, it is
inspiring change.”**

- William Arthur Ward

The Imperative for Action



*Wisdom: An Excellent University, characterized by
scholarship engagement for the community towards the
sustainable development.*



SUCs are strategically located to play a key role in regional development.



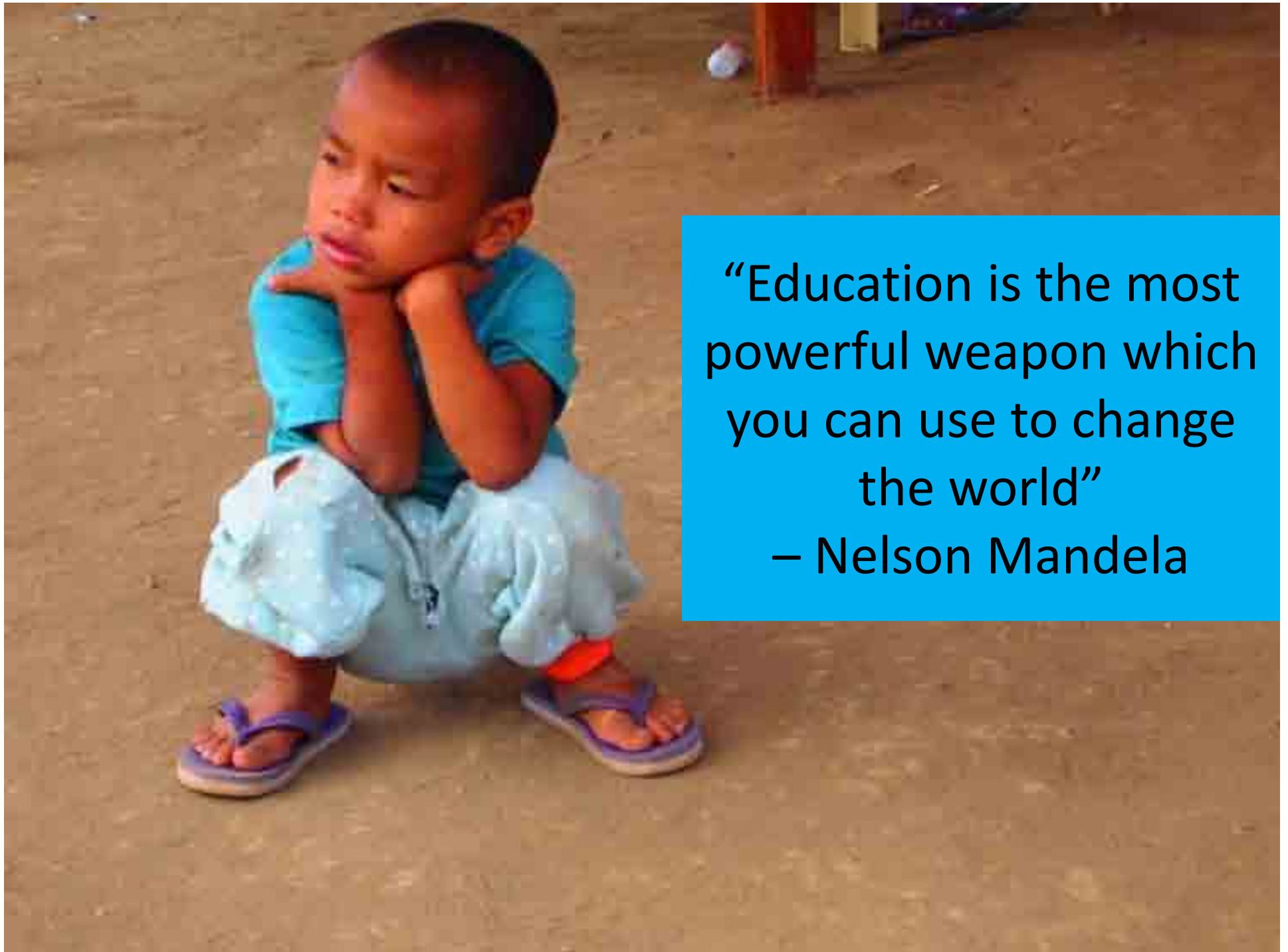
What can
Academic
Institutions
do?



We are not DA,
DSWD,
DENR, NGOs and
other
Development
Organizations ...



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scholarship engagement for the community, the
sustainable development.

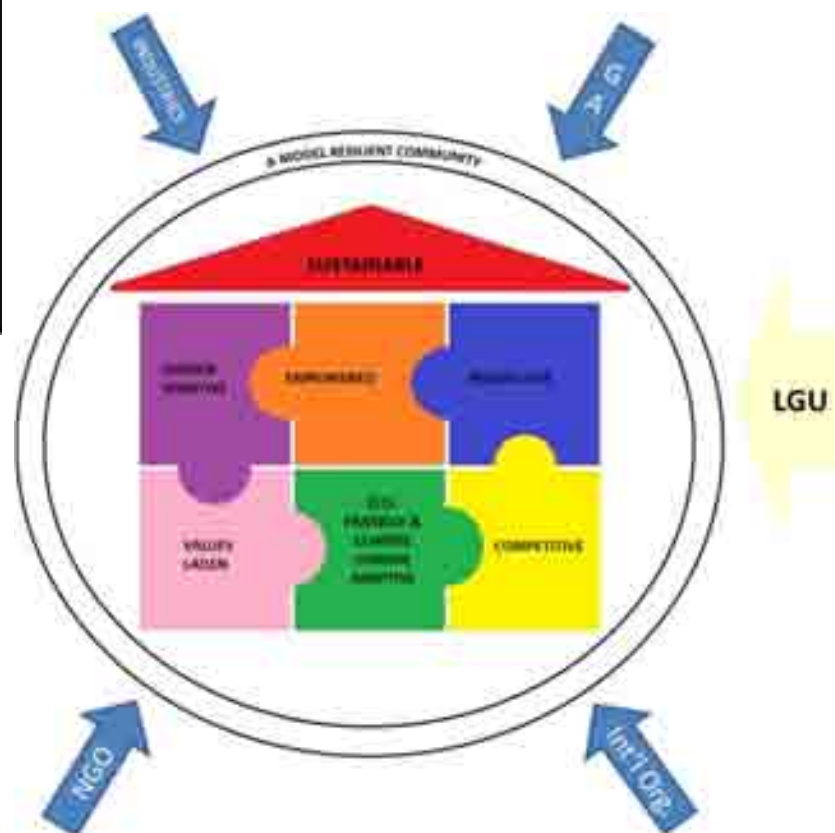


“Education is the most
powerful weapon which
you can use to change
the world”
– Nelson Mandela

“Educating to Build Resilient Communities” The Framework



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sustainable development.*



INSTRUCTION



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sustainable development.

MAPA – Major in Health Emergency and Disaster Risk Reduction and Management

BU Graduate School in response to the felt need of the Province of Albay in particular and the Bicol Region in general, embarked on formal graduate education program focusing on the very real problem of health emergencies.

The university offered a Masters in Public Administration (MAPA) course, major in Health Emergency & Disaster Management in partnership with the Department of Health, at DOH Manila to 36 scholars who are mostly medical doctors, nurses, and HEMS coordinators in different public and private hospitals and LGUs in Metro Manila and nearby provinces.



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BU College of Medicine



The Bicol University College of Medicine aims to provide service delivery clinic in collaboration with the Bicol Regional Training and Teaching Hospital.

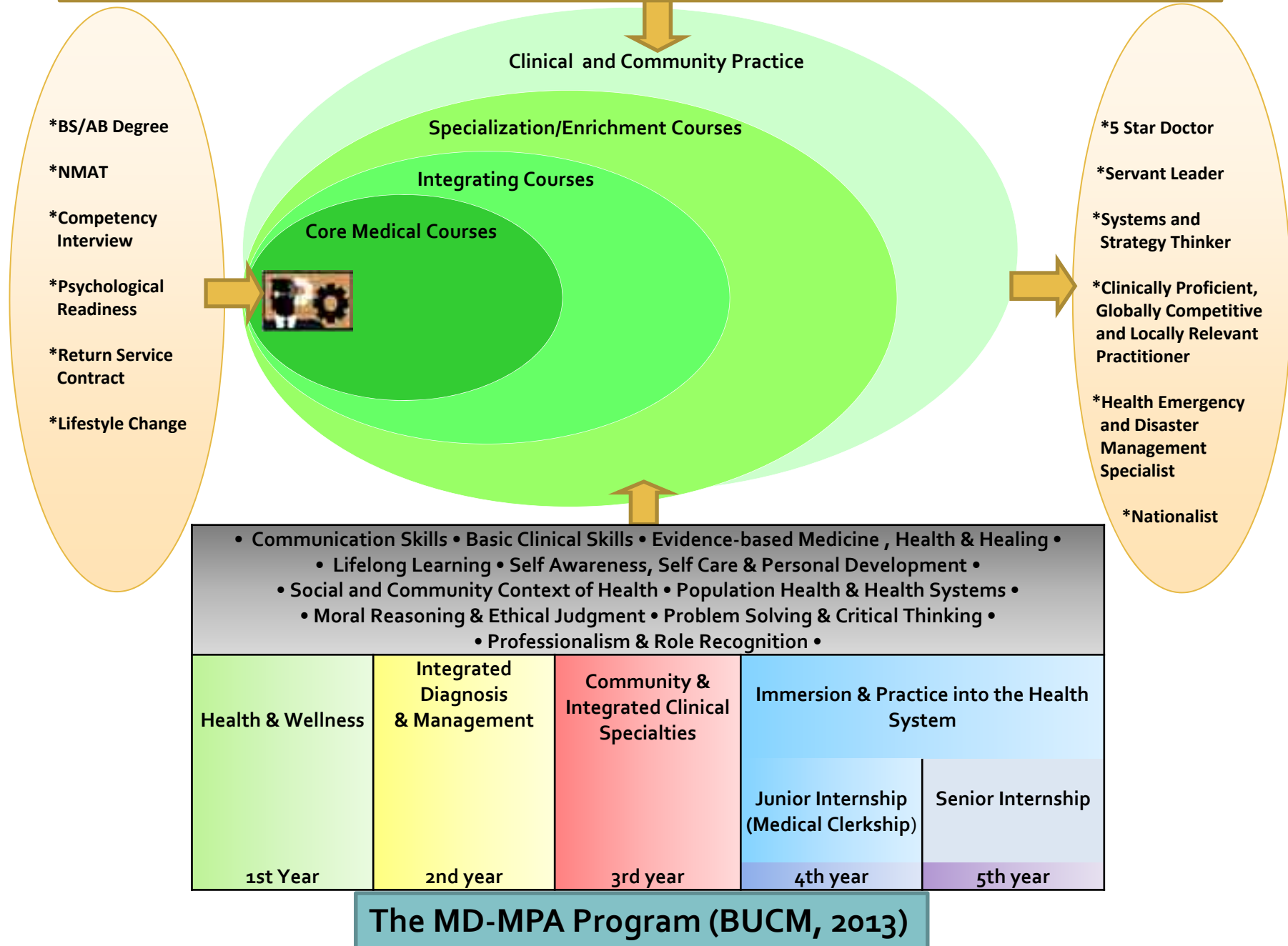
At the same time, the college will house a disaster response team. BUCM also initiated development for response mechanism disaster in order for families to be resilient in times of disasters.

The college will also advocate IEC materials for health programs such as health brochures, tele-medicine, tele-health and community & college website to name a few.



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Legislative, Social, Political, Economic, Technological Change/Developments



Microfinance Competency Program



The university's curriculum for the BSBA followed the nomenclature of the CHED Memorandum Order (CMO) No. 39 Series of 2006/ Policies, Standards and Guidelines for Bachelor of Science in Business Administration.

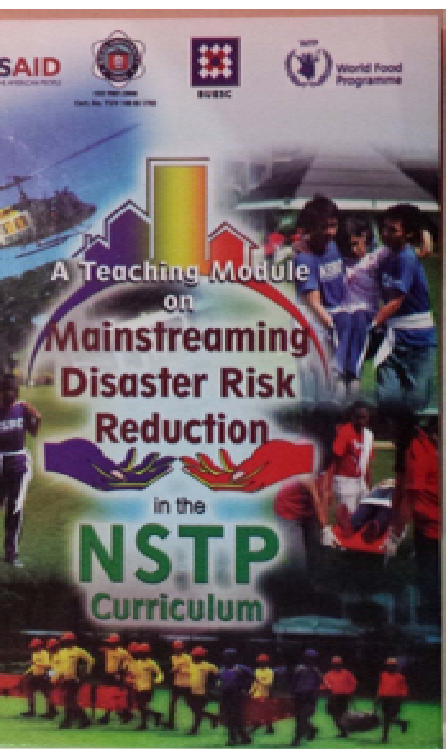
The four year degree program includes a three-year diploma course in microfinance and a two-year certificate in microfinance.

The program, through the partnership of different national organizations which includes the Benigno S. Aquino Foundation and local banks, will aim to reduce poverty in the region through the graduates of the BSBA program.



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aching Module on Mainstreaming DRR into the NSTP Curriculum



- Developed by BU Extension under WFP DPR Phase2 for NSTP
- Intends to guide the instructors and implementers on how they can best impart vital information about disaster and their effects on the lives of the people
- How the students can acquire necessary skills on disaster preparedness and risk reduction



RESEARCH



Strengthening the Capacities for Climate Risk Management and Disaster Preparedness in Selected Provinces of the Philippines (Bicol Region)



This research venture is a joint project of Bicol University, Central Bicol State University of Agriculture, Department of Agriculture, PAGASA and FAO.

The research identified good agricultural practices, options for upland and lowland areas against floods/flashfloods, typhoon and saline intrusion strong wind, continuous rain and drought and fisheries and aquaculture good practices options against typhoon, storm surge and fish kills.

Some of the key findings include better understanding of climate/weather forecast & timely delivery of advisories to LGUs & farmers enhances local disaster preparedness and reduces livelihood losses and awareness of farming/fishing communities to their current vulnerabilities and future climate risks are key to effectively initiate adaptation/DRR measure.



Assessment Of The Carbon Sequestration Potentials Of Different Agroforestry Farm Models For Climate Change Mitigation And Adaptation

Agroforestry is a land use management systems that integrates wood trees, agricultural crops, livestock and aquatic resources in some piece of land for economic productivity and environmental sustainability.

Agroforestry have been integrated in some development programs in Bicol, validating its potentials as a mitigation and adaptation to climate change impacts has never been explored particularly in the provinces of Albay and Sorsogon.

The general objective of the project is to assess the potential of Carbon Stocking, Sequestration and



Coconut-based S and T Interventions for the Rehabilitation of Selected Calamity-Stricken Areas in Albay

Low coconut productivity in Bicol can be attributed to frequent typhoons that visit the area, sources and quality of planting materials, and occurrence of natural disasters as the impact of the changing climate.

Partium-led initiative (PCA-ARC, DENR-BU, CBSUA)

Program aimed to showcase the science package of technologies in rehabilitating the coconut sector in Albay from damages that were brought about by the series of natural calamities.



Providing S and T Solutions to Typhoon Devastated Cocobased Farms"

Involved STBF for rehabilitation of
typhoon devastated cocobased farms at
barangay Malabnig, Guinobatan,
Samar

Initial 1 MS at 3 hectares to 35
adopters at 30 hectares in Dona
Cedres, Lomacao and 24 adopters at
30 hectares in Paulog, Basag of Ligao

Involved a total of 65 farmers on Contour
farming with MS as extension agent

Involved a total of 35 farmers on basic ICT

Involved a total of 30 farmers on Protective
Culture Technology, Coconut
cropping and Integrated farming



Integrated Management Systems in Rice Production Areas of Albay Under Changing Rainfall Pattern

IR funded project

Farmers commonly practice the use of broad spectrum non-selective pesticides as it is often the only known and available option of defenses against Rice Black Bug (RBB) infestation. Hence, persistent RBB infestations trigger environmental degradation in the long run, aside from the immediate economic losses.

A solution to the farmers' problems is to learn more about ecological and sustainable management approaches for RBB, to prevent crop losses and diminish environmental damage at the same time.

Furthermore, such knowledge can access information on the



Enhancing Research Utilization of Sweet potato livelihood Development in the Disaster Prone Communities

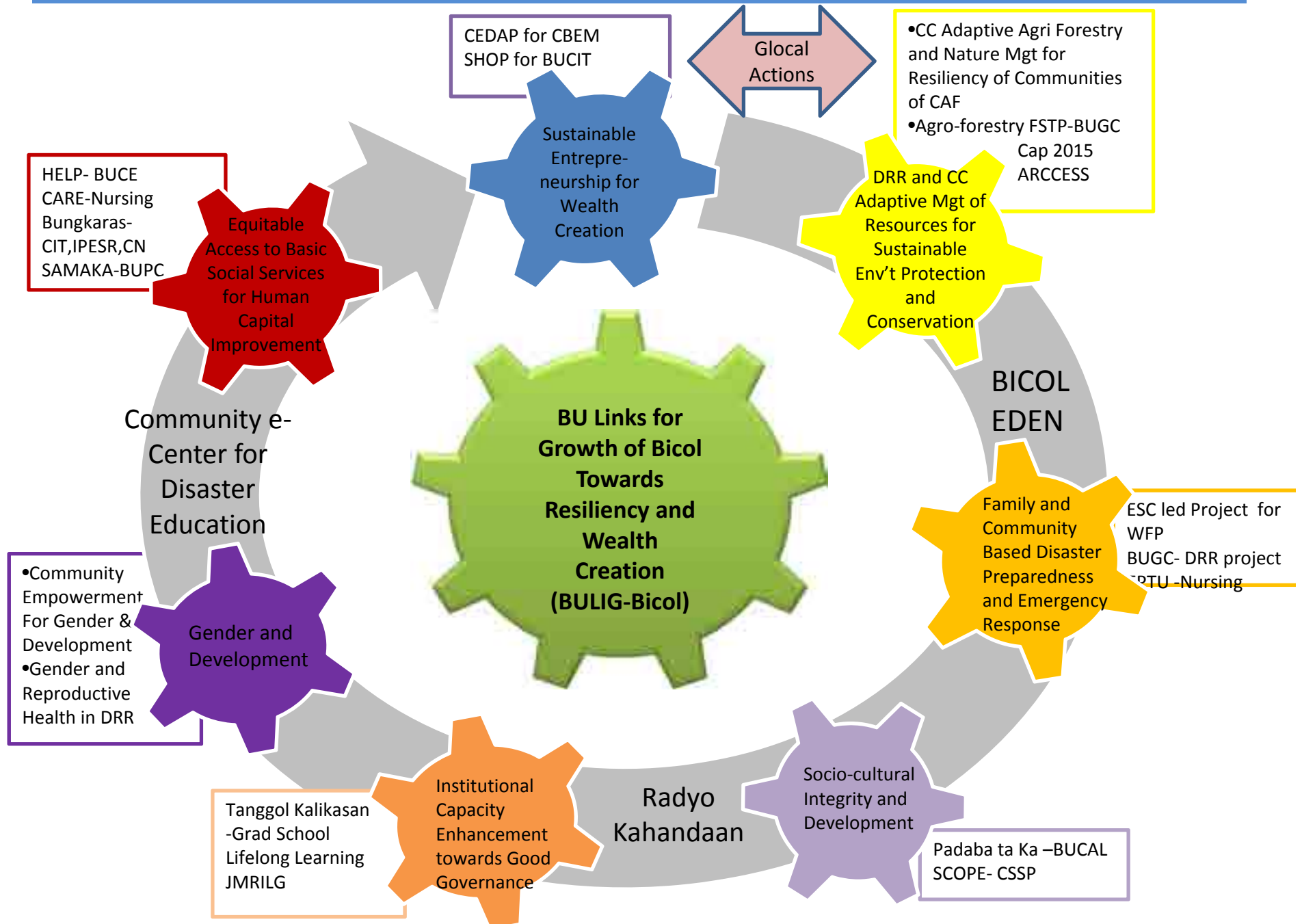
ARRD funded project with Visayas State University –
Tropine Rootcrop Research and Training Center, University
of the Philippines – Institute of Plant Breeding, Tarlac College
of Agriculture, Dept. of Agriculture – Regional Field Unit III,
Provincial Government of Tarlac – Office of the Provincial
Agriculturist, Province of Albay, Office of the Provincial
Agriculturist, and Bicol University

The program's overall goal is to enhance the role of
sweet potato as a key food and cash crop for livelihood
stabilization in farming communities affected by natural
disasters.

The project aimed to improve the availability as sweet potato
as a buffer food and nutrient source among households in
disaster prone Albay; to strengthen capacities of farmers, local



BU Extension Framework (Educating to Build Resilient Communities)



Sustainable Upland Farming Through the Establishment of "Barangay Sagip Saka" (Conservation Farming Villages-CFVS) in Ligao City, Albay



The project is a modality for enhancing the transfer of conservation farming technologies and practices anchored on participatory planning, monitoring, and evaluation processes at the community level.

The project is located in the three barangays of Ligao City, namely: Abella, Maonon and Oma-Oma.



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sustainable development.*

Project V-Dawn

The project is a community DRR model focusing on values-based development alternatives for the welfare of the needy in Albay.

It aims on building community resiliency against hunger, poverty, environmental degradation and climate change impacts.

The project currently has 104 partner farming families which will benefit from the project's objectives.



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The Enhanced Potting Preparation Technology for the Resettlement Site

the Enhanced Potting Preparation (EPP) Technology came about as a sort of intervention for the newly relocated families in the aftermath of a tremendously devastating typhoon Reming that hit the province of Albay

The EPP demonstrated its promise in making food production possible. After a year of its implementation in the relocation sites and in the BUCAF campus, words of acceptance and appreciation about the EPP technology were heard and elicited not only from the cooperators but also from those who were amazed to see the blossoming and fruit-bearing plants in EPP containers.



Training and Technical Assistance on Formulating Risk Sensitive CLUP



To identify:

- hazard zones and levels of vulnerability
- to reduce risk on low lying coastal areas or river beds
- to ensure effectiveness of response activities such as escape routes
- to project long term climate change impacts on human settlements and livelihoods
- provide guidance in formulating suitable risk reduction policies and zoning regulations such as building codes
- provide guidance in adopting suitable risk reduction measures in the development projects in the area



The DAR Agrarian Reform Community Connectivity and Economic Support Services –Market Oriented Agri Technology and Agri Extension Services

- Support service delivery mechanism DAR created to contribute to the overall goal of rural poverty reduction particularly in agrarian reform areas focused on the 6 provinces of Bicol Region
- Aimed at improving the farm and off-farm incomes of Agrarian Reform Beneficiaries (ARBs) through their organizations
- 9,863 farmer beneficiaries covering 13,586 hectares of agricultural land



Family Preparedness: the Basics in Disaster Risk Reduction and Management Project

Under the UN WFP Disaster Preparedness and Response (DPR) program which directly focused on household level interventions that built the capacity of its members to prepare for disasters and calamities that might beset their communities

- Vulnerability, Risk and Coping Capacity Assessment
- Capacity Building Trainings on FBDRRM
- Training & Technology Transfer on Home-Based Food Production

- *Trained Families on Disaster Preparedness
- *Family Preparedness Plan, Guideline, IEC Kit
- *Home-Based Gardens Established
- *FBDRRM institutionalized in LGUs

Food Secure and Disaster Resilient Families

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Household Vulnerability and Coping Capacity Assessment



Conduct of household and vulnerability assessment of the families vis-a-vis their coping capacity with the end view of determining their resiliency to disasters that regularly occur in the area.



Family Preparedness Planning Worksheet



Crafting of family disaster preparedness plan for each household. The first level of preparedness will be by individual families who will have an available guide for the whole family for disaster preparedness.

- Vulnerability, Risk & Coping Capacity Assessment
- Capacity Building Trainings on FIDRRM
- Training & Technology Transfer on Home-Based Food Production



FAMILY PREPAREDNESS: THE BASICS IN DISASTER RISK REDUCTION AND MANAGEMENT

Food Secure and Disaster Resilient Families

Training on First Aid and Basic Life Support



Build knowledge and skills in basic first aid and basic life support which will help the community in disaster preparedness training the first aid training community.

Training on Organic Vegetable Production and Food Processing



Increase income, home-based production on organic vegetable production and food processing to generate and purchase in terms of food security for the family.

Reducing the Impact of Disasters Through Education

Synergizing Science and Technology with Indigenous Knowledge System for Climate Smart Disaster Risk Reduction and Management of LGUs to Ensure Resiliency of Communities through Extension



Communities are no longer viewed as mere victims but rather as survivors who have the capacity to reduce vulnerability to disasters and adapt to impacts of climate change using local and indigenous knowledge passed on from one generation to another.

Synergizing Science and Technology with Indigenous Knowledge System for Climate Smart Disaster Risk Reduction and Management of LGUs to Ensure Resiliency of Communities through Extension

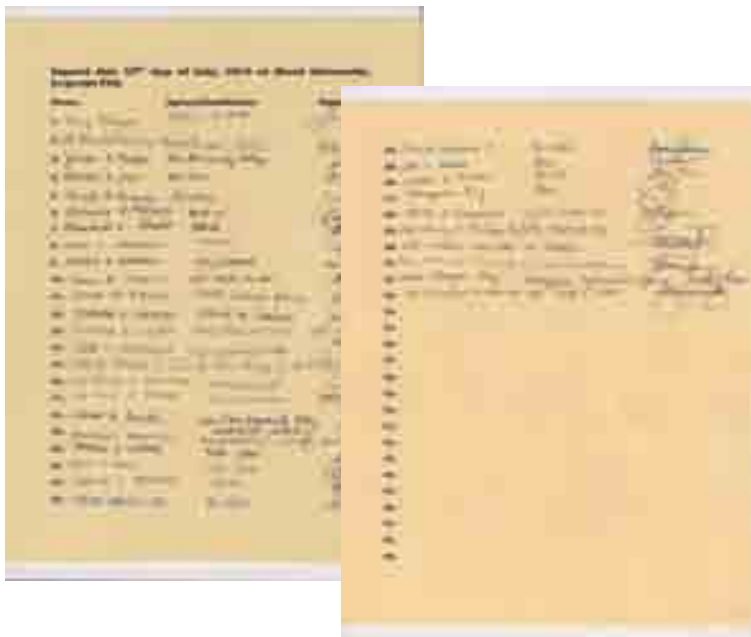
Project Output

- Publication on Indigenous Knowledge for DRR and CCA (A collection of good practices and lessons learned from experiences in Sorsogon, Philippines)
- Documentation and database of Climate Smart Science and Technology for DRR and CCA
- Trained LGUs and project beneficiaries on various climate smart DRR technologies
- Trained families on CC/Disaster Resilient Livelihood for Food Security
- Established Disaster Education e-Resource Center in 6 municipalities

Disaster Education and Messaging



Reducing the Impact of Disasters Through Education



List of IEC materials produced, adapted, translated and distributed

- Earthquake Safety Tips
- Radiation Safety Tips
- Paglikay sa Pagkaakog
- Pagasikaso sa aking nadidipisilang humangos
- Pagaasikaso sa tao na intake sa puso
- Mga dapat gibohon pag may baha
- Mga dapat gibohon pagkatapos nin baha
- Mga senyales kun ika inaatake sa puso



Oras Kahandaan



- Radio program on Disaster Education and Messaging – every Thursday 10:00-11:00 am DZRC FM radio
- To have wider reach of clientele
- A pioneer Radio Program on disaster preparedness
- A venue for information sharing on disaster information



PARTNERSHIP IS KEY

Bicol University works well with
Communities, local and
international organizations,
national agencies, local
governments



Establish Partnerships



World Food Programme



USAID
FROM THE AMERICAN PEOPLE



Commission on Higher Education V



Office of Civil Defense V



Bureau of Fire Protection V



Philippine Society of NSTP Educators and Implementers Inc.



Provincial Government of Sorsogon

Vision: A University of Excellence characterized by scholarship engagement for the community towards sustainable development.



NETWORKS & LINKAGES

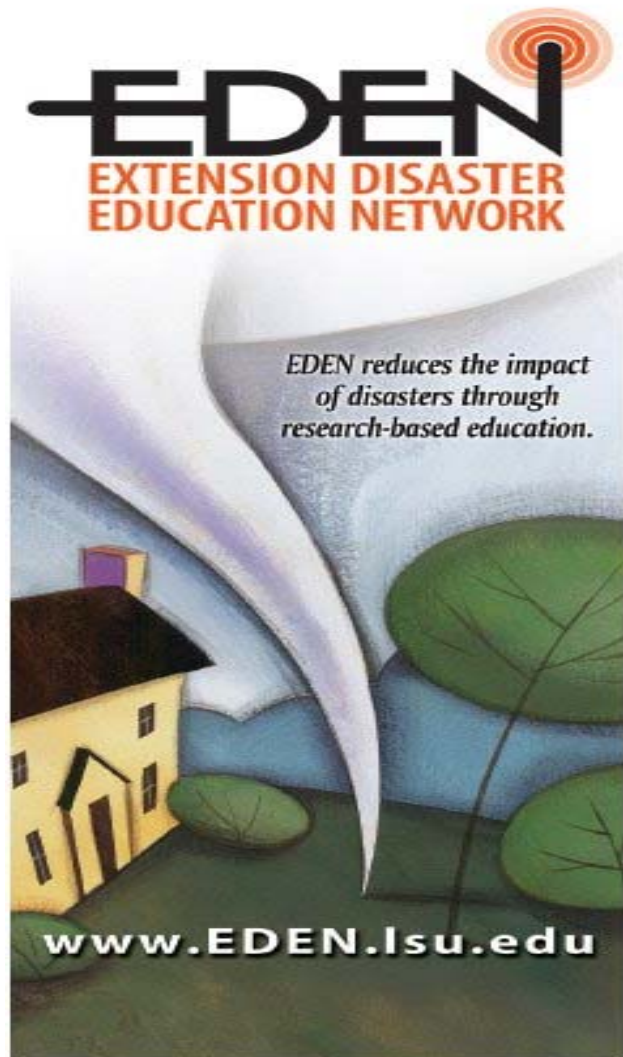
The Bicol Extension Disaster Education Network (EDEN) is a collaboration among 33 public and private agencies in Bicol.

It was noted that building communication network is critical to mainstreaming climate change and disaster risk reduction.

At the same time, Bicol EDEN is a collaborative multi-stake holder effort by institutions across the region to share education resources to reduce the impact of natural and man-made disasters.



Extension Disaster Education Network with Bicol University Extension as the 1st International Member



A collaborative multi-stakeholder effort by institutions across the Region to share education resources to reduce the impact of natural and man-made disasters through:

- interdisciplinary and multi-state research and education programs addressing disaster mitigation, preparation, response and recovery;
- Linkages with Land Grant Universities and local agencies and organizations;
- Anticipation of future disaster education needs and actions;
- Timely and prompt communications and delivery of information that meets audience needs;
- Credible and reliable information

DISASTER RISK REDUCTION AND CLIMATE CHANGE ADAPTATION TRAINING INSTITUTE



The Climate Change Academy, spearheaded by Albay Gov. Joey Salceda offers various programs in relation to disaster risk reduction. It is also the first of its kind in the country.


Located in Bicol University Main Campus, the academy boasts executive, professional, special and community-based courses on DRR and management. It will also provide certificate programs on evacuation camp management, debris management, water sanitation management and incident command management in the near future.



Let's embrace our true nature...
Yes, we are WOVEN TOGETHER

Our Collective Efforts...



A photograph of a dirt path winding through a dense forest. The path is covered in brown leaves and leads into the distance. The surrounding foliage is lush and green, with some trees visible in the background. A semi-transparent green box is overlaid on the upper part of the image, containing the text "Our actions today will shape our future".

Our actions today
will shape our future

Photo by Yeb Sano



DIOS MABALOS!
(THANK YOU!)