CONFRONTING CLIMATE CHANGE:

Unity of Grassroots Communities and Advocates for Action and Solidarity

Proceedings of the First Philippine National
Grassroots Conference on Climate Change
20-21 April 2009 Balai Kalinaw,
University of the Philippines Diliman, Quezon City

A Publication of the Philippine Climate Watch Alliance
and the Center for Environmental Concerns - Philippines

Proceedings of the National Grassroots Conference on Climate Change
is a special publication of the Center for Environmental Concerns- Philippines (CEC-Phils),
in cooperation with the Philippine Climate Watch Alliance (PCWA)
and Kalikasan People's Network for the Environment (Kalikasan PNE)

Published by the
Center for Environmental Concerns-Philippines

No. 26 Matulungin Street, Barangay Central,
Diliman, Quezon City 1100, PHILIPPINES

Telefax: +632-9209099
Email: info@cecphils.org
Web: www.cecphils.org

Cover design: Leon Dulce
Layout: Jennifer Furigay, Leon Dulce
Documentation: Lisa Ito
Mediosa Montereal
Computer Professionals Union (CPU) interns
Photo credits: CEC-Phils, CPU

Confronting Climate Change:

Unity of Grassroots Communities and Advocates for Action and Solidarity

Proceedings of the
First National Grassroots Conference on Climate Change
20-21 April 2009
Balay Kalinaw, University of the Philippines,
Diliman, Quezon City

A special publication of the
Center for Environmental Concerns-Philippines

2009

Table of Contents

First Philippine National Grassroots Conference on Climate Change

INTRODUCTION

Climate change is expected to adversely and disproportionately impact on the lives of poor communities throughout the globe. As one of the countries where both poverty incidence and increasing gap between the rich and the poor remain high, and where climate change is expected to bring about more extreme weather events and other related adverse impacts, the Philippines and its poor communities in both rural and urban areas are expected to bear the brunt of impacts caused by climate change. This is ironic, considering that the country is nowhere among world's top emitters of greenhouse gases.

There is a need for environmentalists to link up with grassroots communities to address the issue of climate change and its looming impacts on poor Filipino communities: to find ways on how to adequately educate and inform communities about the issue, to document how the impacts of climate change are being concretely experienced at the grassroots levels, and to propose measures to cope with these emerging challenges. There is also a need for communities from developing countries to unite and demand accountability from the developed countries and transnational corporations which have contributed most to global warming.

The Philippine Climate Watch Alliance (PCWA) was launched on 16 November 2008 at the University of the Philippines in Diliman to address the need for dialogue, solidarity, and education among grassroots communities. Formed as a broad network of non-government organizations, grassroots and people's organizations, and individuals aiming to examine and address the impacts of climate change on marginalized communities within the country, PCWA aims to be a major campaign center on the issue of climate change impacts on the Philippine communities is concerned. It also hopes to unite a diverse number of sectors representing the basic masses on the issue of climate change and the actions that can

be undertaken at the local, national, and international levels.

From its current membership of 40 organizations, PCWA continues to expand its ranks, especially among people's organizations and representatives of grassroots communities with the aim of expanding public awareness and action on the issue of climate change impacts on the poor.

Among the major activities that PCWA has organized in 2009 along with the Center for Environmetnal Concerns (CEC) and the Kalikasan People's Network for the Environment (Kalikasan PNE) is the ***First Philippine National Grassroots Conference on Climate Change and Communities (NGCCC)***, a two-day study conference at the Balai Kalinaw, University of the Philippines in Diliman,Quezon City last April 20 to 21.

The Conference is one activity aiming to foster much-needed nationwide dialogue with grassroots communities and create a space for generating unities, solidarity, and further action. It is also a preparatory Philippine action to the People's Action on Climate Change (PACC) held from September 28 to October 5 2009 in Bangkok, Thailand.

The NGCCC aims to unite the broadest number of grassroots organizations, cause-oriented organizations, and people's organizations towards addressing the issue of climate change through education, research, advocacy, and action.

Specifically, the event aimed to:

- To convene a significant number of Filipino grassroots/community-based and people's organizations to share their experiences united on the issue of addressing climate change
- To develop current discourse and ability to analyse the causes, impacts, and responses to the issue of climate change from a pro-people, patriotic, scientific and progressive perspective
- To identify and consolidate local data and plans for a national and international solidarity, campaign, and action plan on climate change
- To contribute, through its unities and outputs, to the international lobbying efforts for climate justice towards the Conference of Parties 15 in Copenhagen in 2009.
- To recruit more organizations into becoming members of PCWA.

PROGRAMME

DAY 1: 20 April 2009 (Monday)

Time	Event	Resource Person
8:00-8:30 a.m.	**Registration**	
8:30-9:30 a.m.	**Opening Ceremonies**	
	Cultural Presentation	**Sining na Naglilingkod sa Bayan (Sinagbayan)**
	Welcome Remarks	**Dr. Helen N. Mendoza** President, SOLJUSPAX Covenor, Philippine Climate Watch Alliance (PCWA)
	Keynote Address	**Hon. Satur C. Ocampo** Deputy Minority Leader, Philippine House of Representatives Representative, Bayan Muna (People First) Partylist
9:30-12:00	**Plenary Forum 1: Introduction to Climate Change**	
	The Science of Climate Change: An Overview for Community Organizations	**Dr. Teresita R. Perez** Director, Department of Environmental Science Ateneo de Manila University
	Climate Change: Third World Vulnerability, First World Accountability	**Ms. Rosario Bella Guzman** Executive Editor IBON Foundation
	The Philippine Government's Response to Climate Change	**Hon. Maria Ana Consuelo A. Madrigal** Chairperson Committee on Environment and Natural Resources, Senate of the Philippines
	Open Forum	
12:00-1:00	Lunch Break	
1:00-4:00	**Plenary Forum 2: Discussion and Positions on Critical Climate Issues**	
	Clean Development Mechanism in the Philippines: Promises and Realities	**Ms. Neth Dano** Associate Third World Network
	The Effects of Philippine Biofuel Production	**Mr. Arnold Padilla** Public Information Officer Bagong Alyansang Makabayan (BAYAN) National
	The Campaign Against the Bataan Nuclear Power Plant Revival	**Dr. Giovanni Tapang** Chairperson Advocates of Science and Technology for the People (AGHAM)
	Effects of Climate Change on the People's Health	**Dr. Troy D. Gepte** Senior Epidemiologist National Epidemiology Center, Department of Health
	Open Forum	
4:00-4:30	Coffee Break	

4:30-6:30	**Workshop 1: CLIMATE CHANGE IMPACTS AND RECOMMENDED ADAPTATION STRATEGIES/ SOLUTIONS**	
	Upland Communities, Flash Floods, and Landslides	**Mr. Ricarido M. Saturay, Jr.** Geologist Agham
	Climate Change, Fisherfolks, and the Coastal Community	**Mr. Vince Cinches** Executive Director Central Visayas Fisherfolk Development Center
	Climate Change and its Impacts on Agriculture	**Dr. Lourdes Tibig** Chief, Climate Data Section Philippine Atmospheric, Geophysical and Astronomical Services Administration (PAGASA)
	Health Impacts on Urban Poor Communities	**Health Alliance for Democracy (HEAD)**
6:70-7:30	**Closing of Program for Day 1**	
Emcees: Ms. Natalie Pulvinar and Mr. Danilo Ramos		

DAY 2: 21 April 2009 (Tuesday)

Time	Event	Resource Person
8:30-9:00	Recap of Day One	
9:00-10:00	**Plenary Presentations of Day 1 Workshop Groups**	
	Workshop Group on Upland Communities	
	Workshop Group on Coastal Communities	
	Workshop Group on Agricultural Communities	
	Workshop Group on Urban Poor Communities	
10:00-12:00	**Plenary Forum 3: Accountability and Responsibility for Global Warming**	
	Accountability of the Philippine Government	**Ms. Frances Quimpo** Executive Director Center for Environmental Concerns-Philippines
	The Business of Climate Change; The Role of Transnational Corporations and International Financial Institutions	**Mr. Paul Quintos** Executive Director Ecumenical Institute for Labor Education and Research (EILER)
	Open Forum	
12:00-1:00	Lunch	
1:00-3:00	**Workshop 2: Strategies for Addressing Climate Change Impacts**	
	National Campaign and Advocacy Strategies	
	International Solidarity Work	
	Legislative Workshop on Climate Change	
	Plenary Reporting	
3:00-3:15	Coffee Break	
3:15-3:30	**Synthesis of Plenary Reporting**	**Mr. Fernando Hicap** National Chairperson PAMALAKAYA Pilipinas
3:30-4:00	**Plenary: Conference Resolutions**	
4:30-5:00	**Presentation and Approval of the Philippine Climate Watch Alliance Statement**	**Mr. Clemente Bautista, Jr.** National Coordinator Kalikasan People's Network for the Environment
5:00-5:30	**Closing Remarks**	
5:30-7:00	Solidarity Dinner	
Emcees: Ms. Marjorie Pamintuan and Dr. Giovanni Tapang		

PARTICIPATING ORGANIZATIONS

NATIONAL

Anakpawis
Kilusang Magbubukid ng Pilipinas (KMP) National
Kalipunang Damayang Mahihirap ng Mamamayan (KADAMAY)
Gabriela National
Samahan ng mga Maralitang Kababaihan (SAMAKANA)
Liga ng Kabataang Moro (LKM)
KATRIBU
PISTON-National Capital Region
PISTON-Cubao
Rural Missionaries of the Philippines (RMP)
Kalikasan People's Network for the Environment (Kalikasan PNE)
Religious of the Good Shepherd (RGS)
National Council of Churches in the Philippines (NCCP)
Promotion of People's Church Response (PCPR)
Pamalakaya
TFUC
Citizens Disaster Response Center (CDRC)
EED-TFIP
Sibol ng Mamamayan Para sa Agham at Teknolohiya (SIBAT)
Haring Ibon
Center for Environmental Concerns-Philippines (CEC)
Bayan Muna
Advocates of Science and Technology for the People (AGHAM)
Bagong Alyansang Makabayan (BAYAN)
Ibon Foundation
Diocese of Morong, Bataan
Ecumenical Institute for Labor Education and Research (EILER)
Computer Professionals Union (CPU)
Agham Youth
Youth STOP BNPP Revival
Bulatlat
Council of Health Workers
Amihan National
Philippine Network for Food Security Programmes (PNFSP)
Management Systems (MASAI)
Brotherhood of Destiny
KASIMBA
Council for People's Development and Governance (CPDG)
Council for Health and Development (CHD)
Parish Pastoral Council (PPC)
Great Work Movement Philippines
Polytechnic University of the Philippines Center for Global Warming Studies

LUZON

Cordillera People's Alliance (CPA)
SAVE Cagayan Valley
Alyansa ng Nagkakaisang Mamamayan sa Hilagang Quezon (ALMANA)
Kilusang Magbubukid ng Pilipinas-Bicol region
Kilusang Magbubukid ng Pilipinas-Cagayan Valley
Kilusang Magbubukid ng Pilipinas-Ilocos region
Alyansa ng Magbubukid sa Gitnang Luzon (AMGL)
Sagip Isla Sagip Kapwa (SISK)
Agham-Central Luzon
Bukal-Batangas
KASAMA-Timog Katagalugan
Apit Tako
COMMED
Council of Health Workers

VISAYAS

Central Visayas Fisherfolk Development Center (FIDEC)
Negros Council for Ecological Protection (NCEP)
Kilusang Magbubukid ng Pilipinas-Negros
Central Visayas People's Network for Life and Environment, Inc. (KINABUHI)
Madia-as Ecological Movement (MEM)
Sagupa-Eastern Visayas
Kilusang Magbubukid ng Pilipinas-Negros
Kilusang Magbubukid ng Pilipinas-Panay
Kilusang Magbubukid ng Pilipinas-Cebu
Bagong Alyansang Makabayan-Panay
Pamalakaya-Iloilo
Pamanggas-Panay

MINDANAO

Kagugpungan sa mga Lumad sa Habagatang Mindanao (Kaluhamin)
Pamalakaya-General Santos
Panalipdan Youth
Suara Bangsamoro
Alliance for Genuine Development in Mindanao, Inc.
PROTECT-Zamboanga del Norte
Kusog sa Katawhang Lumad (Kalumaran)
Kilusang Magbubukid ng Pilipinas-Southern Mindanao
Kilusang Magbubukid ng Pilipinas-Far South Mindanao
Kilusang Magbubukid ng Pilipinas-Western Mindanao region
KASAMA-Bukidnon
Gabriela-CARAGA region
Gabriela-General Santos
MOFA
Bayan Muna-CARAGA region

Welcome Remarks

Rep. Satur C. Ocampo
House Deputy Minority Leader
Bayan Muna Party List
House of Representatives

Good morning!

It is my honor to welcome all of you to the first national grassroots conference on climate change and communities in the country. I congratulate the prime movers of this conference, the Philippine Climate Watch Alliance (PCWA), for making this endeavor a reality in these very challenging times that are being confronted by the Filipino people.

As the first nationwide gathering of representatives from various sectors of society and grassroots organizations united on climate change impacts and accountability for such, this conference is a landmark venue for strategic collective education on the various climate change-related issues. The concrete effects of climate change on the lives of marginalized communities and possibilities to effectively address this global challenge must be discussed.

It is significant to point out that addressing this global crisis has to be from the standpoint and viewpoint of the impoverished majority in the Philippines and the world. It is the oppressed and underprivileged masses who suffer most from the adverse effects of climate change.

The PCWA is correct in saying that global warming and climate change is now adversely and disproportionately affecting the lives of poor communities across the world. The Philippines and its poor communities are bearing the brunt of extreme weather events and disasters such as flashfloods, massive landslides and prolonged droughts never experi-

enced in the past decades. This situation lays down the need for all sectors to link up with grassroots communities to address climate change and its immediate and long-term impacts on the poor majority of the Filipino people.

Allow me to cite a study released by the Economy and Environment Program for Southeast Asia (EEPSEA) last January 2009. The study reiterated that the Philippines, along with Vietnam, Cambodia, Thailand, Laos, Sumatra and Indonesia, is one of the most vulnerable to climate change in Southeast Asia.

It is worthy to note that the study placed only the Philippines where climate change vulnerability is throughout the entire nation.

In Vietnam, only the Mekong River Delta region was found to be vulnerable. Thailand's Bangkok region, as well as the eastern and western portions of Indonesia, was also singled out as prone to climate change.

The study attributed the Philippines' standing in the regional climate change map not only to its vulnerability to typhoons but also to a number of other natural calamities and climate-related disasters, which are rarely experienced in other parts of the Southeast Asian region. The country is hit by about 20 to 22 typhoons annually.

To draw up the said climate change map, the EEPSEA looked into three factors, namely: the normalized indicators of exposure (multiple hazard risk exposure), sensitivity (human and ecological), and adaptive capacity.

The National Capital Region (NCR), Southern Tagalog, Bicol Region and the northern regions of Cagayan Valley, Central Luzon, and Cordillera Administrative Region were found to be the most vulnerable regions in the Philippines.

This recent study, along with various analyses done by United Nations bodies and our Filipino environmental defenders and the scientific community points to the timely formation of the of the PCWA in November 2008 by grassroots organizations and communities to assert that the poorest and most marginalized sectors within Philippine society are in fact already suffering from the impacts of climate change. These sectors have a vital stake in the issues of governance, finance, dialogue, representation and proposed programs and legislation related to addressing climate change.

The crisis of climate change is not simply because of exogenous factors such as seasonal natural weather phenomena. Climate change was and is brought about by decades of human-induced surplus production based on the capitalist greed for super profits.

More importantly, addressing climate change should be based on raising the question of sustainability of our global systems and structures of governance. Questions such as "is this system under the regime of imperialist globalization tenable and sustainable or not?" and "Is another world possible?" should be tackled by this conference. Let us not forget that the same economic and political structures of power dominating the country and the world today has brought us to both the climate change crisis and the global financial crisis now ravaging the world.

Urgency of the Issue

At the core of climate change is global warming. This was brought about by the increased concentration of greenhouse gases (GHG), particularly carbon dioxide, in the earth's atmosphere that has lead to the unprecedented rise in global temperatures within a very short period of time.

Scientists have determined that the current GHG concentration in the earth's atmosphere is the highest in the last 650,000 years and is expected to continue rising in the coming decades.

Global warming is brought primarily by the unsustainable production, use and emission of fossil fuels and GHG in the last 200 years. Industrialized countries and their transnational corporations (TNCs) in the North particularly the United States, Japan and European countries are the foremost contributors to the total carbon dioxide emissions in the world since 1840.

The unabated and wanton destruction of the earth's remaining forests, including our own remaining forest cover, which act as natural sinks of carbon in the atmosphere, hastens the process of global warming.

Typhoons, hurricanes, floods and landslides are becoming rampant and more destructive across the world. More communities are experiencing worsening water scarcity. Biodiversity is similarly threatened due to the resulting destruction of natural habitats. The increase in severity and damage of natural disasters and calamities worsens widespread poverty.

To the ordinary Juan and Juana dela Cruz already severely incapacitated by poverty and hunger, the impacts of climate change only means more deaths, illnesses, displacement, and social disasters if nothing is concretely done to address this.

Internationally, averting global warming and addressing its adverse impacts were enshrined in the Kyoto Protocol, a landmark international agreement on climate change in 1998. But the Kyoto Protocol only targeted a 5.2% total reduction of global carbon emissions by 2012 from the 1990 level. It also introduced market-based and profit-oriented mechanisms such as carbon trading and the Clean Development Mechanism (CDM) to reduce carbon emissions of countries or corporations.

After a decade of implementation, the Kyoto Protocol has miserably failed to reduce global carbon emissions. Its carbon trading proposal was eventually used as a convenient excuse of the highly industrialized countries from North America and Europe to evade the real problem of carbon emissions. With the failure of the Protocol, governments of the United States and the few highly-industrialized countries are opposing the immediate formulation of new international agreements to significantly reduce global carbon emissions in the next decades.

It is imperative for the PCWA to come up with a people-centered platform for meaningful and significant initiatives and programs to critically and urgently address climate change in the country and internationally.

The assertion for responsibility and accountability for the current climate change crisis must be arrived at by this Conference. The conference declaration should also clearly criticize the

Arroyo administration's lack of a concrete program to mitigate the impacts of climate change by helping the people adapt to the effects of global warming. The Arroyo administration's globalization-oriented policies and programs in the fields of energy, mining, forestry, agriculture and trade are making the Philippines much more vulnerable to the effects of climate change. These policies will also increase the country's GHG emissions in the long run.

Global warming and climate change is definitely much more than a purely environmental concern. The cause of global warming is rooted in the unsustainable, highly wasteful and profit-oriented production of the global economy. Under this set up, industrialized countries and their TNCs will continue to extract, produce, and consume carbon-based fuels to drive profit-oriented industries in unsustainable and destructive levels.

We should also clearly stand against the current neo-liberal globalization policies of the highly-industrialized countries, international financial institutions and export credit agencies, of which the Philippine government adheres to. We must advocate actions both of the international community and the Philippine government that primarily consider and uphold the interest and welfare of the majority of our people and the environment.

I hope that you shall have a fruitful conference that will set the tone for the eventual efforts to reach out to the widest number of our mass members, constituents, networks, and organizations nationally and internationally.

Thank you very much. *Mabuhay kayong lahat!*

The Philippine Government's Response to Climate Change

Excerpts from an extemporaneous speech by
Senator Ana Maria Consuelo Madrigal
Chairperson
Senate Committee on Environment and Natural Resources
20 April 2009

Thank you very much to our emcees for the beautiful introduction.

I am glad because you mentioned the Japan-Philippines Economic Partnership Agreement (JPEPA). This is because its ratification is one of the largest sins of the Philippine Senate against the nation. The JPEPA is an instrument for exploitation. This is an uneven, unequal, and unjust bilateral trade agreement being used by Japan, and allowed by the Philippine government for the Japanese to exploit our natural and national resources, resulting in environmental destruction.

What is painful about the whole thing is that only two of us (in the Senate) have voted against JPEPA. In 2010, look at who have been consistently pro-Filipino. Many say that they love the environment and are against climate change; but they do not divulge that they have loved JPEPA more.

The theme of climate change is relevant in as much as we recognize that climate change is the result of environmental destruction. However, climate change is being continued by industrialized nations. If you look at all industrial nations who use climate change as their platform, you will also see that they are using climate change as an excuse to perpetuate the unequal policy of carbon trading. That is why I am against only focusing on climate change alone: as it is but one part of the broad spectrum of problems related to environmental destruction in the Philippines.

In the Philippines, President Gloria Macapagal-Arroyo can stand on her head--maybe she will be taller then--to fight climate change. She even organized a commission headed by former DENR Secretary Heherson Alvarez.

However, the issue of climate change will only be relevant if the government and the Executive is willing to repeal Republic Act 7942 (The Philippine Mining Act of 1995). You can not talk about climate change and push policies such as JPEPA. You can not talk about climate change and uphold 100% foreign ownership of our mines and natural resources. You can not talk about climate change, if because of mining, not only is our environment destroyed but also our riches are not even given back to the people. They are shipped in airplanes, without monitoring, to countries such as Japan and we will buy back the processed goods.

If the Philippines should engage in mining, the industry should be nationalized. A national mining program should demand that the mineral be processed here locally, so we can increased having value added by producing finished goods here instead by being enslaved by finance and finished products from abroad. We are selling out our

natural resources at such a cheap price and buying them back as finished goods. The same goes for our other resources in dams, thermal energy, logging, fishing, natural gas and oil exploration.

Unfortunately, while President Arroyo speaks of climate change, her administration has affirmed the foreign ownership of mining and the JPEPA. Now, they do not want a new power law to pass because it wil bring down power rates.

I would like to address the issue of climate change by talking about each and every person's right to a balanced and healthy ecology. And that is what our government is not doing.

This Constitutional provision should supersede all other considerations in finance, economy, trade, and commerce. It is a healthful ecology should be maintained and protected by the government. But President Arroyo has reversed this. Because the financial considerations for promoting mining, logging, and natural resource exploitation are so great, she has put the fate of the Philippines in the hands of the neocolonialists, the new imperialists, or whatever else one calls them.

What is more frightening is that President Arroyo, her cronies and the big industrialists are going into the energy sector. In response, the Senate, with the new leadership, wants to pass an anti-trust and anti-monopoly law, because you can not have one only person such as Manny Pangilinan owning newspapers, owning SMART and PLDT, owning land, and now wanting to own energy resources.

If there were many oligarchs during the Marcos times, there are fewer oligarchs now as they is a growing consolidation of economic interests in a few. This is actually being accelerated in the hands of Gloria Macapagal-Arroyo and a few families and conglomerates with foreign multinational ties. This imperils environmental protection as they will pay whatever price has to be paid in order to exploit our environment natural resources and Philippine sovereignty – which will ultimately lead to climate change and ultimately more poverty in the Philippines.

If there is anything to do now, it is to speak out. We can make noise, but in the 2010 elections, let us not let the hypocrites in the Senate and Congress to come back for another term. We should no longer tolerate those who pretend to be nationalist but have their own selfish agendas. Others claim to be liberal, but liberal only with themselves.

Among the political parties, only one remains truly for the people. I leave you wth hope in your hearts that there is now a new party by those who are truly nationalist, pro-poor and pro-democracy. Thank you.

Solidarity Message

Dr. Helen Mendoza

It is clear that global warming is here. *Dapat lang na tayo ay maghanda at kumilos. Ang pangunahing tatamaan ay ang grassroots dahil wala silang kakayahan* (It is only right that we prepare and act. The foremost to be affected is the grassroots because they do not have the capacity). In 2004, for instance, 1.4 million Filipinos were affected due to a Luzon-wide flood.

Accountability partly rests on us and on the government. Why? Due to the acceptance of activities and policies, such as, groundwater extraction in areas such as CAMANAVA and Central Luzon. Another example is the indiscriminate location of fishponds which have destroyed mangroves protecting us from storm surges and high waves. In other countries where tsunamis are a threat, they are protected from further damage by mangroves.

Number three, *pagkasira ng kagubatan* (deforestation) has contributed to landslides. Much of the deforestation occurred in the 1950s onwards; when I came back to look at these areas 30 years later, the forests and watersheds have been already destroyed. Now, we are feeling the effects of these, such as what Iloilo experienced during Typhoon Frank. We need to talk about these things now, especially among the ranks of the poor.

International organizations have initiated activities such as the production of hazard maps of vulnerable countries globally. In these maps, the whole Philippines is colored red; meaning that we are among the top countries in terms of vulnerabilities to climate change.

There is a need for mainstreaming disaster risk reduction (DRR) in the Philippines. How do we cope with DRR? We need to look at the effects on urban poor and coastal communities, what are the relocation options and possibilities for future impacts on climate change.

Plenary Presentations: Summary and Excerpts

The Science of Climate Change: An Overview for Community Organizations

Dr. Teresita R. Perez
Director, Department of Environmental Science
Ateneo de Manila University

Dr. Perez's presentation focused on reviewing the basic science of climate change, noting that many well-known impacts of global warming are not always applicable in the Philippines as the country's tropical and marine conditions tend to keep the weather and climate stable.

Dr. Perez emphasized **the likely effects of global warming on the Philippines**, noting the following trends in sea level rise and changes in regional surface temperatures, rainfall and tropical cyclone activity which can then cause impacts on other sectors, such as agriculture, forests, and water resources:

- Nearly all non-urban stations in the region show a rise in mean temperature between 1960 to 1998, indicating more hot days and warm nights, and fewer cold days and nights. While this is not enough to cause heat waves, this may affect agriculture, as a 2004 IRRI study indicates that rice yields decline with higher night time temperatures.
- An increasing number of tropical cyclones appearing in the Western Pacific region has been noted. In the Philippines, the rise in typhoon crossings is most pronounced over Visayas. The effect of global warming on typhoon strength is currently the subject of intense scientific debate. What is certain is that Philippine populations, especially along riverbank and mountainside communities, are much more vulnerable to typhoons than before--even if typhoon strength doesn't increase, the numbers of people at risk are rising.
- Observed changes in regional rainfall extremes from 1961 to 1998 may mean longer dry periods, but heavier rains during the wet season. Changes in mean annual rainfall over the Philippines indicate a significant reduction over northeastern Luzon and a significant increase over the Western Visayas region during La Niña season. Currently being investigated is the change in the start of the rainy season.

The **downstream effects of a changing Philippine climate** will make an already bad situation worse:

Energy: The bulk of local power supply in RP comes from hydroelectricity; any decrease in rainfall means more reliance on imported coal and oil.

Agriculture: Less rain or too much rain means less harvest; changes in timing of rain is also critical. A rise in carbon dioxide favours crops, but weeds like it more; it can also enhance corn growth, but only in the roots and stalks and not its edible parts.

Forests and biodiversity: Moist forests will shrink and turn into dry forests. Global warming may also raise flood risk, worsening habitat degradation and species loss. However, the human impact contributing to deforestation still much more damaging

Health: Disease vectors (i.e. mosquitoes) will expand range while displacement due to disasters will be a worsening health issue.

Water Resources: Rainfall is decreasing over Luzon and parts of Mindanao where major dams are found, while rainfall is increasing in the Visayas where there are no major dams. Sea level rise may cause salinity intrusion, putting areas such as Laguna Lake at risk.

Marine Resources: Warmer temperatures can kill coral while higher carbon dioxide in atmosphere can disrupt carbonate chemistry, make shell and bone formation difficult.

Filipinos should reduce their greenhouse gas emissions, but for the right reasons. Even if the Philippines stops emitting carbon dioxide, there will be little effect on global warming
We should reduce emissions for its other benefits, such as cleaner air, less oil dependence.

Actions are needed to reduce exposure and vulnerability; evacuate risky areas and enhance preparedness; develop, promote new crops and farming technologies; seek co-benefits, not just mitigation; promote clean mass transport to improve air quality and renewables to reduce oil dependence; and reduce pressure on resources by finding alternative livelihoods.

Planting trees enhances our surroundings and habitats, but it will never be enough against climate change. A tropical tree removes eight kilograms of carbon dioxide annually (or eight tons per hectare); to sequester current emissions, each Filipino should plant at least 100 trees per year. Another response is also eating less meat; the impact of meat eating is nearly the same as driving a car.

The impacts of global warming on many sectors are currently unclear, but may become more pronounced as warming continues. Science is needed to focus on understanding, adaptation and preparation. The old, hard lessons remain: use less energy, walk, eat more vegetables, and reach out to the grassroots.

Third World Vulnerability, First World Accountability

Ms. Rosario Bella Guzman
Executive Editor, IBON Foundation

The issue of climate change is an issue of ironies and contradictions. This presentation will focus, first, on the historical accountability for global warming, and second, on overall vulnerability, at the global and Asia-Pacific level.

The first irony: industrialized nations, and particularly their transnational corporations (TNCs), an anarchic system of production—meaning, production whose planning is not based on the peoples needs—and the unsustainable balance of consumption are mainly responsible for global warming. Yet, backward and poor countries such as those of Asia and the Pacific are more vulnerable and less able to adapt to a changing climate.

The second irony: while it is true that the vulnerability of poorer countries is also related to their geographic and climatological features, it is also because their economies and people's control over critical resources have been trampled upon by globalization of TNC activities.

The third irony: the solutions and 'assistance' being forwarded by the industrialized countries, led by multilateral organizations and international financial institutions, are still within the moribund capitalist system and still at the expense of the peoples of the Third World.

On the issue of accountability

The anthropocene era is a period during which human activities have become a dominant force affecting not only the planet's landscape, but also its atmosphere. Increases in greenhouse gas (GHG) emissions since the Industrial Revolution in the mid-18th century –-carbon dioxide, for instance, increased by 36%, methane by 17% and nitrous oxide by 151% –-are directly linked to over two centuries of growth in the burning of fossil fuels by humans. Carbon dioxide accounts for 80% of GHG emissions, mainly due to burning of coal and crude oil.

Is everyone accountable then? Not really. The main culprits are the United States, European Union, Japan and the rest of the G-8 countries, who are responsible for 65% of historical emissions. The Northern part of the globe accounts for 90% of carbon dioxide accumulation; the US cornered 25% of carbon dioxide emissions in 2003 alone.

High concentrations in the atmosphere are also recorded in backward countries where TNC operations of industrialized countries are based and whose economies are being transformed by TNCs to feed the energy demand and consumption needs of the industrialized countries. Consider the following:

- TNCs account for 50% of all oil, gas and coal extraction and refining.
- Only 10 TNCs account for about 41% of world production of oil and gas.
- TNCs control 80% of land worldwide which is cultivated for cash crops.
- Only 20 TNCs account for about 90% of the sales of hazardous pesticides and other agricultural chemicals.
- TNCs dominate and control extractive industries that have irreversible effects on the environment, such as metal mining and energy extraction.

Geographic and climatological features should also be considered, such as variability in temperatures and seasonal precipitation (such as rainfall influenced by summer and winter monsoons) within climate sub-regions (arid and semi-arid, temperate, north and south tropical).

Consider the following climate trends for the next decades:

- Warming of the earth's temperature (from 3°C in the 2050s to 5°C in the 2080s)
- Rainfall changes (from 7% in the 2050s to 11% in the 2080s)
- Sea-level rise (from 3-16 cm by 2030 to 7-50 cm by 2070)
- Climate extremes and surprises
- Natural disasters which can result from climate extremes, such as wild fires in grasslands and rangelands, mudslides, mudflows and avalanches, droughts, severe flooding, tropical cyclones, forest fires, heat waves, heavy downpours, and torrential rains
- Other climate hazards such as tropical cyclones, floods, landslides, and droguth

On human and ecological sensitivity

Human sensitivity of course is best measured by how

many people actually depend on natural ecologies for their livelihood. In the Asia/Pacific region, dependence on agriculture ranges from 15% (China) to 57% (Myanmar) of the gross domestic product. The rural population ranges from 35% (Malaysia) to 81% (Cambodia). Around 60 to 80 percent of the population are engaged in small-scale agriculture.

There are also high percentages of coastal populations and forest people in the region, as over half of Asia's population resides in coastal locations and in low-lying islands. The Food and Agriculture Organization (FAO) estimates that over 90 percent of the 15 million people working at coastal waters are small-scale fishers, excluding yet the tens of millions of the poor who fish inland rivers, lakes, ponds, and even rice paddies.

According to the UN Hunger Task Force, half of the world's hungry are smallholders; a fifth do not have their own land; a tenth are agro-pastoralists, fisherfolk and forest users; while only a fifth live in urban areas. The World Bank estimates that 90 percent of the world's 1.1 billion poor (as approximated by the World Bank) derive a portion of their income from forests while over 600 million keep livestock which is a critical cash asset for many.

Other grave consequences of climate change are coastal inundation and erosion, loss of ecosystems and biodiversity, disease and heat-related mortality, water shortages, and further stress on agriculture and forestry, aquaculture, fishery, the economy and human security.

On Adaptation and Adaptive Capacity

Specifically, adaptation refers to actions, policies, and measures that increase the coping capacity and resilience of systems to climate variability and climate change. The extent to which adaptation can be implemented to increase coping capacity and resilience is referred to as *adaptive capacity*.

Variability in adaptive capacity is a function of different capabilities within nations and communities with respect to financial resources, technology, expertise, and eco-

nomic diversification that are often called upon to implement adaptation actions.

Among the factors and consider to consider in determining adaptive capacity include the state of the economy, social vulnerability, and governance. Vulnerabilities include:

Economy: problematic trade deficits, increasing aid dependence, increasing role of official development assistance (ODA), increasing debt burden, over-reliance on foreign direct investment (FDI), declining revenue, increasing privatization of key industries and social sectors, speculation and financial instability, and corruption

Social vulnerability: high unemployment rates; low quality of available jobs; forced and child labor; bulk of labor force population is in the rural areas; continued and increasing landlessness; high rural-to-urban and cross-border migration; no living wages; high poverty incidence; prevalence of hunger; widening and deepening income inequality; majority of the poor situated in the rural areas, with women as the most disadvantaged; marginalization from resources, markets and services; lack of or diminishing social services; internal displacement (physical, economic and affected by armed conflict including eviction and dislocation due to 'development projects'); threatened environment due to overexploitation; logging, mining, hydropower dams and other natural resources extraction and plunder; human rights violations and political repression.

Governance: countries generally governed by elite-democracy governments and some by constitutional monarchy and military junta; characterized by lack of transparency and accountability and in some cases, large-scale corruption; resources, especially land, water, natural resources and capital, continue to be concentrated in the hands of few elite families; no social investment in building knowledge, technology and infrastructure, much less in adapting to climate change.

The most vulnerable areas in Southeast Asia include: all the regions of the Philippines, the Mekong River Delta region of Vietnam; almost all the regions of Cambodia; North and East Lao PDR; the Bangkok region of Thailand; and the west and south of Sumatra, and western and eastern Java in Indonesia. The most vulnerable regions within countries are the states of Kelantan and Sabah in Malaysia, the National Capital Region, Southern Tagalog, Cagayan Valley, Central Luzon, the Cordillera Administrative Region, and Bicol Province in the Philippines.

Accountability of Industrialized Countries, Third World governments and their elite

Multilateral institutions, in behalf of TNCs of the industrialized countries, have promoted the unsustainable pattern of production and consumption by pushing for policies of liberalization, privatization and deregulation into the Third World countries. These policies have rendered Third World economies vulnerable and less adaptive to the impact of natural and man-made disasters.
Imperialist globalization has facilitated TNCs amassing tremendous amounts of profits at the expense of human and sustainable development of the Third World.

Imperialist globalization has even facilitated the relocation of the more labor-intensive production stages of TNCs to Third World countries, using more carbon-intensive techniques and less efficient technologies in order to lower production costs for TNCs. And now underdeveloped countries such as China and India are being held equally liable. It has intensified the local elite control over resources and supported inutile and corrupt governments of the Third World.

Governments have taken the hands-off style of governance with regard to public utilities and social services and relegated the provision of these to foreign corporations (TNCs). Planning, designing and implementing development projects, including adaptation to climate change, therefore have been privatized or become dependent on foreign debt. Governments have also opened up the environment to foreign plunder and exposed communities and nations to environmental crisis.

As such, governments have defaulted on actively raising income levels, production subsidies, price controls, education and technical skills, food distribution, health care, and disaster preparedness.
They have neglected the most economically and climate-vulnerable sectors such as the poorest sections of the peasantry, namely small-scale farmers, small-scale fishers, indigenous peoples, mountain and forest people, upland farmers, pastoralists, including the urban poor.

How much can the Earth tolerate?

Current mainstream mitigation and adaptation measures are still within the framework globalization; the business-as-usual solution. The more relevant question is: How much of these can we still tolerate? The earth will heal itself, they say. However, things might reach the point where the earth will heal itself...but without us.

Clean Development Mechanism in the Philippines: Promises and Realities

Ms. Neth Dano
Associate, Third World Network

Countries which have developed and industrialized are less hardly hit by the impacts of climate change. Where does CDM come in? It is a form of payment based on the Kyoto Protocol.

Defined in Article 12 of the Kyoto Protocol, the Clean Development Mechanism (CDM) is a flexibility mechanism that allows a country with an emission-reduction or emission-limitation commitment under the Kyoto Protocol (Annex B Party: developed countries) to implement an emission-reduction project in developing countries.

Such projects can earn saleable certified emission reduction (CER) credits, each equivalent to one ton of carbon dioxide, which can be counted towards meeting Kyoto targets. Industrialized countries will be giving funding to poorer countries for projects related to this. For instance, for each ton of greenhouse gas trapped in a project implemented in a poor country, the point or carbon credit will go to an industrialized country which funded the project.

It is the first global, environmental investment and credit scheme of its kind, providing a standardized emissions offset instrument (CERs) .

The mechanism stimulates sustainable development and emission reductions, while giving industrialized countries some flexibility in how they meet their emission reduction or limitation targets. It allows developed countries (Annex 1/Annex B) to earn CERs that can be applied to partially meet their greenhouse gas emissions reduction commitments under the Kyoto Protocol whenever they undertake emissions reduction projects that contribute to sustainable development in a non-Annex I Party where land, technology and labor are less costly, which result in real, measurable, verifiable and long-term greenhouse gas reductions that are additional to any that would otherwise occur.

How does the CDM work? A CDM project must provide emission reductions that are additional to what would otherwise have occurred. Projects must qualify through a rigorous and public registration and issuance process; approval is given by the Designated National Authorities. The mechanism is overseen by the CDM Executive Board, which is answerable to the countries that ratified the Kyoto Protocol.

Operational since the beginning of 2006, the mechanism has already registered more than 1,000 projects and is anticipated to produce CERs amounting to more than 2.7 billion ton of CO2 equivalent in the first commitment period of the Kyoto Protocol, 2008–2012.

What are the conditions for CDM Projects? They should assist developing country parties in achieving sustainable development. It is considered as “Additional” if greenhouse gas emissions are reduced below the level that would have occurred in the absence of the registered CDM project activity. Public funding from developed country Parties must not result in the diversion of Official Development Assistance (ODA) and separate from and not counted towards their financial obligations under the UNFCCC and Kyoto Protocol. A PDD, Validation Report and Letter of Approval from Host Country are required in order to be registered as CDM.

In the Philippines, there are currently 21 CDM projects registered at CDM executive board; 59 : 21 CDM projects approved by the Philippines' DNA; and 47 CDM projects at or after the validation stage.

Key Issues in CDM in the Philippines include :

- Processes and requirements are too costly, burdensome and centralized. Small scale project participants are at a disadvantage in terms of CER pricing.
- Projects require big investments from the proponents to start, prove additionality, and have it verified, validated and registered
- Verification is by UNFCCC-accredited foreign Department of Energy (DOE) whose costs are borne by the proponents

Resource-poor proponents cannot comply with CDM process, costs and requirements. Small-scale project participants are at a disadvantage in terms of CER pricing. As a result, elites capture in developing countries with CDM projects. There is a concentration of CDM projects in big developing countries; there is virtually no CDM project in Africa and LDCs, for instance.

There are also questions on the methodological and technical verification processes in measuring greenhouse gas emissions in CDM projects, as well as inadequate and subjective documentary evidences to support the justification for additionality of a project activity. How accurate are the current methods used to measure trapped gases? Scientists are currently debating on the methodologies themselves.

There is also the question of possible cases of corruption involving DOE and project proponents, spurious projects, questionable evidences of "additionality", manipulation of methodologies to increase CERs and connivance between DOE, DNA and proponents.

There is an emerging "CDM industry" that virtually controls the development of projects in developing countries and the marketing of CERs in the carbon market. In the Philippines, PhilBio facilitated more than 90 percent of CDM projects; EcoSecurities has virtual monopoly of the trading of CERs from CDM worldwide. The economic returns are dependent on the price of carbon in the market.

There is a lack of clear criteria for demonstrating high sustainable development contribution of project activities to ensure that the dual objectives of the CDM are met and CERs from such projects with high SD benefits are accorded first-rate values, as well as questionable sustainable development value and the misappropriation of "sustainable development" to describe superficial community benefits. Examples of these include the construction of basketball courts and waiting sheds, contribution to local beauty pageants, payment of local taxes, etcetera.

The Effects of Philippine Biofuel Production

Mr. Arnold Padilla
Public Information Officer,
Bagong Alyansang Makabayan
(BAYAN) National Office

Ang krisis ng monopolyo kapitalismo ang pandaigdigang konteksto sa pagsusulong ng biofuels. Ginagamit na dahilan ang climate change para maghanap ng alternate source of energy pero ang totoo, nagkukumahog ang mga imperyalistang bansa na i-monopolisa ang mga bansang mapagkukunan ng fuels. Kaya hindi binibigyang solusyon ang global energy insecurity at pagkawasak ng kalikasan, at lumilikha ng ibayo pang atake sa kabuhayan ng mamamayan.

Walang pakinabang ang mamamayang Pilipino sa programang biofuels ni Pangulong Gloria Macapagal Arroyo. Sa halip, patitindihin nito ang kawalan ng lupa ng magsasaka at kahirapan sa kanayunan, gayundin ang kawalang seguridad sa pagkain ng bansa.

Diumano, ang Biofuels Act of 2006 ay:

- Magbibigay solusyon sa pagiging lubhang palaasa ng bansa sa imported na langis
- Magpapababa sa presyo ng mga produktong petrolyo sa bansa
- Lilikha ng hanapbuhay at mag-aambag sa kaunlaran sa kanayunan
- Maghihikayat sa mas maka-kalikasang panggatong

Ang tayang lawak ng lupaing agrikultural para tugunan ang demand sa biofuels:

- Noong 2006, tinatayang 14 milyong ektarya ang ginamit para sa biofuels, katumbas ng 1% ng globally available arable land (IEA, 2006)
- Sa 2030, tinatayang aabot mula 35 M ektarya hanggang 53 minyong ektarya ang lawak ng lupaing kakailanganin para sa biofuels o 3.8% ng available arable land (IEA, 2006)
- Sa 2050, tinatayang aabot ito hanggang hanggang 1.5 bilyong ektarya, katumbas ng kabuuang sukat ng mga sakahan sa buong daigdig (Field et al., 2007)

Hindi sapat ang lupaing agrikultural sa mga mayamang bansa para sa biofuels. Kahit taniman ng ethanol ang buong 300 milyong acres ng lupaing agrikultural sa US, makakalikha ito ng biofuels na katumbas ng 15% lamang ng kanyang oil demand. Sa Europe, kung gagamitin ang lahat ng lupaing agrikultural nito para sa biofuels, makakalikha ito ng hanggang 6% lamang ng kanyang oil demand. Ayon sa UNCTAD:

> *"In developed countries, most of the available land is used while in developing countries, the proportion of unused land is significant. Thus, in developing countries there is a considerable amount of unused land that could be cultivated for biofuels".*

Ang biofuels ba ang solusyon sa pagiging palaasa sa imported na panggatong? Hindi. Ang pagsusulong ng programang biofuels sa Pilipinas ay itinulak ng tinatayang papataas na demand mula sa mga mayamang bansa, hindi para sa lokal na konsumo. Halimbawa, ang D1 (UK) ang nag-eeksport ng coco-biodiesel sa Japan, Australia, China, Korea at Taiwan. Ang Chemrez Technologies naman ang nag-eeksport ng coco-biodiesel sa Germany at my planong expansion sa Europe, Australia at New Zealand.

Mahigpit na kontrolado ng mga dayuhang kapitalista, kasabwat at kasama ang mga lokal na panginoong maylupa at negosyante ang produksyon ng biofuels. Ilang proyektong biofuels sa Pilipinas ay hawak ng dayuhan: United Kingdom sa Bronzeoak (ethanol), D1 Oils (jatropha), National Resources (jatropha); Japan sa Marubeni (ethanol), Cosmo Oil (ethanol at biodiesel), Toyo Engineering (cocodiesel); Canada sa Green Corp (cocodiesel)--o kaya ng local landlords at business: Tamlang Valley (Tevez, ethanol), BUSCO (Zubiri, ethanol), FWV Biofields (Lopez, biofuels).

Ito ba ang magpapababa sa presyo ng langis? Hindi. Wala itong makabuluhang epekto sa dayuhang monopolyo kontrol sa industriya ng langis na syang pangunahing dahilan ng mataas na presyo. Hangga't deregulado at kontrolado ng dayuhang monopolyo ang industriya ng langis, patuloy na tataas ang presyo nito.

Lilikha ba ito ng hanapbuhay at magsusulong ng kaunlaran sa kanayunan? Ang biofuels production ay corporate farming. Commercially viable ang biofuels kung malawakan ang produksyon nito at gagamit ng malalawak na lupaing agrikultural. Ibig sabihin, pagpabor sa mga dambuhalang plantasyon at pagtindi ng konsentrsyon at rekonsentrasyon ng lupa sa kamay ng mga dayuhang agribusiness firms, lokal na panginoong maylupa at negosyo. Ayon sa UN Energy:

> *"The benefits to farmers are not assured. [Growing biofuel crops] can be especially harmful to farmers who do not own their land…At their worst, biofuel programmes can also result in a concentration of ownership that could drive the world's poorest farmers off their land and into deeper poverty"*

Itinulak ang Biofuels Act ng mga malaking panginoong maylupa at burgesya kumprador para sa sariling pakinabang:

- Sen. Juan Miguel Zubiri (principal author) – may koneksyon sa BUSCO na interesadong magtayo ng bioethanol plant.
- Rep. Herminio Tevez (co-author) – isa sa may-ari ng Tamlang Valley Agricultural Development Corporation na interesadong magtayo ng P2-B ethanol production complex sa Negros Oriental.
- Rep. Iggy Arroyo (co-author) – isinusulong ang eksempsyon sa CARP ng mga lupaing gagamitin sa produksyon ng bioethanol, halimbawa ang hasyenda ng mga Arroyo sa Negros Occidental.

Sa konteksto ng Biofuels Act, ang ekstensyon ng CARP ay pagtiyak na patuloy na mayroong umiiral na mekanismo para sa ibayong konsentrasyon at rekonsentrasyon ng mga lupaing agrikultural para sa produksyon ng biofuels at pagtiyak na patuloy na bubuhos ang dayuhang kapital sa mga proyektong ito.

79% lamang ng pangangailangan sa bioethanol ang kayang isuplay ng industriya ng asukal sa Pilipinas. Aabot sa 200-40 milyong litro ang taunang pangangailangan sa bioethanol kung matutupad ang probisyon ng Biofuels Act.

Maliban pa sa 10-20 ektaryang kailangang ikumbert sa agro-indusriyal na gamit para pagtayuan ng isang bioethanol processing plant (+ bawat isa ay gagamit ng 7,000-8,000 ektarya makalikha n minimum na 120,000 litro19,035 ng ethanol kada araw), plano rin ng rehimeng Arroyo na ikumbert ang 2 milyong public & idle na lupaing pribado at publiko upang pagtaniman ng jatropha. Inaasahan itong lilikha ng 5.6 B litro ng biodiesel sa susunod na 10-12 taon. Gagamit ang DENR ng 25-taong stewardship program para rito.

Tungo sa papatinding kontrol ng mga dayuhang korporasyon sa mga lupaing agrikultural ng bansa sa pamamagitan ng:

> House Bill 6073 o panukalang Corporate Farming Act of 2009, kung saan ang "*corporations or partnerships concerned are given full management and production control over the purchased or leased lands, plus package of tax incentives*"
> House Resolution 737 o panukalang Charter-change (Cha-cha) upang payagan ang 100% dayuhang pagmamay-ari sa mga lupain sa bansa

Biofuel bubble?

Wala na ang "driving force" behind biofuels dahil bumababa rin ang presyo ng langis at bankarote ang mga major biofuels investors. Kasabay ng global financial at economic crisis, pagtaas ng presyo ng mais (feedstock ng ethanol), at pagbaba ng presyo ng krudo sa daigdig ang:

- Pagbagsak ng kinikita ng mga ethanol producer sa US mula $2.30/galon (2005) sa $0.25/galon (2008)
- Sunud-sunod ang pagkabangkarote ng mga ethanol producer kabilang ang VeraSun Energy, ang pangalawangpinakamalaking ethanol producer sa US

Ang tayang pagtaas ng pandaigdigang demand sa biofuels ay ispekulatibo:

- George Soros (American investment tycoon, speculator): $900 M bioethanol production sa Brazil
- Goldman Sachs (isa sa mga dambuhalang US investment bank na nabangkarote kamakailan): $216 M bioethanol production sa Brazil

Napipinto ang malawakang pagkabangkarote ng mga magsasaka sa ilalim ng programang biofuels. Matitiyak ng CARP ang patuloy na implementasyon nito dahil sa konsentrasyon at rekonsentrasyon ng mga lupaing agrikultural.

Seryosong banta rin ang programang biofuels sa seguridad sa pagkain ng bansa:

- Sa usapin ng suplay at kalagayang net food importer ng bansa, ang malawakang kumbersyon ng pananim at gamit sa lupa ay ibayo pang magpatindi sa kakulangan ng pagkain sa lokal na pamilihan

- Sa usapin ng akses, ang malawakang pagbaling sa produksyon ng biofuels sa daigdig at Pilipinas ay ibayong magtutulak pataas sa presyo ng pagkain – pinatitindi ng ibayong kahirapan sa kanayunan bunga ng kawalan ng lupa at patuloy na pag-iral at paglakas ng mga monopolyo

Ano ang mangyayari sa magsasaka na pinagtanim mo nang pinagtanim ng biofuels crops bilang tagasuplay ng kinakailangan nila? Dahil hindi nakadisenyo batay sa lokal na pangangailangan, ang magsasaka ay "maiiwan sa kangkungan, o sa jatropahan".

"Maka-kalikasan" daw ang biofuels dahil ito ay "carbon neutral" at samakatwid ay makakatulong sa pag-adres sa climate change. Pero maaaring ibayong pagkawasak ng kalikasan ang maging hantungan. Ayon sa mga siyentipikong pag-aaral, pinapatindi ng biofuels ang paglawak ng mga plantasyon, pagtindi ng monocropping, pagtindi ng paggamit ng pestisidyo & iba pang agro-chemikal, at pagtindi ng deforestation. Matakaw rin ang biofuels production sa water resources.

Hindi rin tama na magalit tayo sa agham at teknolohiya dahil galit o ayaw natin sa biofuels production. Ang usapin ay kung sino ang may kontrol ng produksyon at kung ano yung mga epekto ng biofuels sa kalikasan at kabuhayan ng magsasaka.

"Sustainable" biofuels production? "Responsible" corporate farming? Sa WTO halimbawa:

- Lahat ng desisyon ng dispute panel nito na may kaugnayan sa environmental laws ay nagsasabing dapat pahinain ang mga nasabing batas ("trade barrier" kasi)
- Walang pagtatangi ang mga batas nito kung paano nilikha o inani ang isang produkto (walang pakialam kung environmentally destructive ang proseso)

Habang tumitindi ang pamimilit ng mga TNC sa malawakang paggamit ng genetic engineering sa biofuels, nagkakaroon ng ibayong pagtataboy sa mga magsasaka sa lupa at binhi, monopolyo ng mga korporasayon sa agrikultura, at pagkawasak ng lupa at kalikasan. Ito ang kinalabasan ng ilang bagong research kaugnay sa environmental impact ng biofuels:

- Princeton University (2008): nag-aambag ang biofuels sa deforestation at pinabibilis ang climate change
- National Oceanographic and Atmospheric Organization (2007): nag-resulta ang ethanol boom sa pagtaas ng kantidad ng fertilizer na dumurumi sa Mississippi River
- University of Minnesota (2009): kailangan ang 1,000 galon ng tubig upang lumikha ng 1 galon ng ethanol

Ang ating mga pangkalahatang adhikain at panawagan sa usapin ng agrofuels:

- Wakasan ang dayuhan at pribadong monopolyo sa enerhiya, isabansa ang industriya ng enerhiya, linangin ang enerhiya nang may karampatang pagsasaalang-alang sa kalikasan

- Gamitin ang rekurso ng bansa para sa lokal na konsumo at industriyalisasyon, hindi para sa dayuhang pandarambong

- Wakasan ang monopolyo sa lupa, ipatupad ang tunay na repormang agraryo

The Campaign Against the Bataan Nuclear Power Plant Revival

Dr. Giovanni Tapang
Chairperson
Advocates of Science and Technology for the People (AGHAM)

Mula pa noong unang tangkang buksan itong BNPP, matindi ang naging pagtutol ng maraming sektor at bilang ng mamamayan. Sa panahon ng napipintong epekto ng climate change, mas lalo pang dapat itong tutulan.

Limang punto bakit natin tinututulan ang proyekto:

1. Ang BNPP ay depektibo, luma at di ligtas. Maraming problema sa kinalulugaran (site), sa lumang planta, at usapin ng pagtatapon ng basurang nukleyar, kabilang na ang sumusunod na mga punto:

- Sakop ng bulkang Natib ang BNPP
- Geologically active ang paligid at wala pang malinaw na pagaaral sa mga fault na malapit sa BNPP
- Matagal ang ilalagi ng nuclear waste sa mundo at wala pang solusyon sa pagtatago nito
- May carbon dioxide (CO2) emission din ang nuclear plants

Ayon sa konklusyon ng ulat nina Hernandez-Santos noong Enero 12, 1977:

> "*... The above review has revealed the high risk potential for the protection of health and safety of the public if the proposed site is accepted. High probability earth motions associated with earthquakes due to the Manila Trench – West Luzon Trough displacements and presence of a probable fault in the plant location itself may lend to structural failures causing the release of radioactive materials from the nuclear power plant or may cause extensive damage to the plant.*"

2. Ang reduksyon sa carbon emission ng BNPP ay maliit lamang sa konteksto ng buong mundo. Sagot raw ito sa climate change. Pero mahaba ang itatagal ng nuclear waste sa mundo---hanggang 100,000 taon.

Naglilikha din ng carbon dioxide (CO^2) ang nuclear plant. Bawat kilowatt-hour na nangaling sa plantang nuklear ay lumilikha ng 1/3 kadami sa nanggaling sa pagsunog ng natural gas. Anim na beses ito na mas mataas kaysa sa solar at wind energy.

Ang pinakayaman na mga mina ay mabilis nauubos dahil sa pagdami ng mga plantang nuklear. Lalaki ang CO^2 galing sa nuklear kasama sa pagbaba ang laman ng mga natitirang ore bodies. Magkapanahon na ang CO2 galing sa uranium ay aabot sa nanggaling sa pagsunog ng fossil fuel.

3. May iba pang mapapagkunan na indigenous energy sources (geothermal, natural gas, atbp.) para masagot ang kakulangan sa 2012. Solusyon ba ang BNPP sa kakulangan ng kuryente? Hindi. Marami pa tayong ibang mapagkukunan bukod sa BNPP. Marami pang ibang Alternative Energy Sources tulad ng sumusunod:

- Solar (tropical country)
- Wind: 7,400 - 14,363 MW (DOST 70,000 MW) potential
- Geothermal: ikalawa sa buong mundo - 1931 MW – 3131 MW (estimated)
- Tidal Power, Wave Energy, Ocean Thermal Energy

4. Hindi ibig sabihin ng operasyon ng BNPP na maging mura ang elektrisidad. Kung isasama pa ang global financial crisis, bababa pa ang demand o konsumo ng kuryente. Nasaan ang mga planta? Nasailalim sa pribatiasyon at pagbebenta ng mga plantang pangkuryente sa ilalim ng Electric Power Industry Reform Act (EPIRA). Halimbawa nito ay ang Malampaya Project, kung saan 90% ay pagmamayari na mga malalaking korporasyon: ang Shell ang operator at nagmamayari ng 45% ng proyekto, Chevron (45%), at PNOC (10%). Wala sa project ng NAPOCOR ang BNPP.

5. Ang pagpapaandar muli ng BNPP ay kukunin sa mamamayan at uutangin. Dadagdag ng 24.1 centavo/kWh sa singil sa kuryente ang magiging bunga ng BNPP. P295m ang pwedeng kitain o ilagay sa bulsa ng mga korap na opisyal sa gobyerno; magiging ugat pa ng korupsyon ito.

Effects of Climate Change on the People's Health

Dr. Troy D. Gepte
Senior Epidemiologist
National Epidemiology Center, Department of Health

Another emerging and re-emerging issue is the rise of infections and their impact on public health.
Climate change brings about regional weather changes, such as heat waves, extreme weather, temperature and precipitation changes, and sea level rise. Human exposure to these changes will have the following effects on health: temperature-related illness and death, extreme weather related health effects (floods, storms, etc.), and health effects of air pollution-related exposures.

I will give an overview of the effects of climate change on health, categorizing these into:

- Temperature-related and weather-related effects
- Natural disasters due to extreme climate/weather events
- Other likely health impacts

Why are these important? Because these disruptive events have their greatest impact in poor countries. In the Southeast Asia and Western Pacific regions, most deaths are caused by natural disasters. Our country statistics are incorporated in that of the Western Pacific statistics.

The two categories of climatic extremes are a.) simple extremes of very low or very high temperatures, and b.) complex events such as droughts, floods, or hurricanes.

This can have deadly effects. Extremes of temperature can kill; the very old, the very young and the frail are most susceptible. There will be more intense heatwaves as well as warmer summers and milder winters. The effects of weather will vary between populations.

Natural Disasters

The increasing trend in the number of victims due to natural disasters is partly due to better reporting and partly due to increasing population vulnerability; this may include a contribution from ongoing global climate change. Developing countries are poorly equipped to deal with weather extremes especially in high-risk areas (coastal zones & cities). The number of people killed, injured or made homeless by natural disasters is increasing rapidly.

Additional likely health impacts that are hard to assess include the following:

- Changes in air pollution and aeroallergen
- levels
- Altered transmission of other infectious
- diseases
- Effects on food production via climatic
- influences on plant pests and diseases
- Drought and famine
- Population displacement due to natural
- disasters, crop failure, water shortages
- Destruction of health infrastructure in natural disasters
- Conflict over natural resources
- Direct impacts of heat and cold (morbidity)

Emerging Infectious Diseases (EID)

Patterns of infectious diseases are expected to change. Climatic factors are related to vector-borne diseases, many enteric illnesses and certain water-related diseases. With climate change, we will have a tougher fight against infectious diseases. This is most evident in areas where climate variations are marked and especially in vulnerable populations.

EID refers to newly identified, previously unknown infec-

tions which cause public health problems locally or internationally. Examples of these are SARS, H5N1 influenza, Nipah, Ebola, Hepatitis C, and hantavirus.

The emergence of these diseases may be due to the combined impacts of rapid demographic, environmental, social, technological, lifestyle changes as well as climate change. There are previously known diseases but are becoming a public health problem for the past two decades. These may vary from one country to another and in different regions of the country. Examples are:

Viruses

- Japanese Encephalitis
- Chikunguny
- Dengu
- Hepatitis
- HIV
- Monkeypox

Bacteria

- Leptospirosis
- Legionella pneumophila

Parasites

- Paragonimiasis
- Neurocysticercosis

Re-emerging infectious diseases are on the rise, such as malaria, meningococcemia, and cholera. Contributors to emerging infections include:

- Changing demographics
- Pressure on the environment
- International travel and commerce
- Food supply and food technology
- Microbial adaptation and change
- Health systems breakdown

We live closely with insects and animals:

"Anthroponoses" (such as TB, HIV/AIDS, and measles and indirectly-transmitted, vector-borne anthroponoses (e.g. malaria, dengue fever, yellow fever)) vs. "Zoonoses" (e.g., rabies in dogs; bubonic plague, bird flu). Which emerging infections do you think are public health threats to the Philippines?

Emerging infections in the past 20 years

Re-emerging Infectious Diseases are known diseases which reappear after being eradicated (e.g. malaria and polio), or infections which are increasing in incidence after they have been previously controlled (e.g. Meningococcemia, Plague, Cholera old serotype, Yellow Fever, Diphtheria).

Some examples of vector-borne RIDs are malaria and dengue. Mosquito vectors that spread malaria and dengue need access to stagnant water in order to breed, and the adults need humid conditions for viability. Warmer temperatures enhance vector breeding and reduce the pathogen's maturation period within the vector organism. However, very hot and dry conditions can reduce mosquito survival.

Food and Water-borne Diseases

Higher temperatures and heavier rainfall events may increase occurrence of water-borne diseases. Sanitation services may be severely compromised, contributing to potential contamination of local water supplies. There may also be increases in infectious illnesses in people using recreational waters (e.g. pools and beaches)

Food-related concerns

Climate change impacts could be related to outbreaks of toxic algae in saltwater that contaminate shellfish (e.g. "red tide"). There is increased incidence of food poisoning related to warmer temperatures that increase the survival of microbes and the spread of toxins.

How can we respond?

What should be done now is community-wide understanding and response, guided by policies informed by good scientific advice and a policy-focused assessment of the potential health impacts of climate change. These should also be support for advocacy for:

- Multidisciplinary assessments
- Obtaining responses to questions asked by stakeholders
- Evaluation of risk management adaptation options
- Addressing research gaps to facilitate decision-making

The Business of Climate Change:
The Role of Transnational Corporations and International Financial Institutions

Mr. Paul Quintos
Executive Director,
Ecumenical Institute for Labor Education and Research (EILER)

May banggaan sa pagitan ng ng pribadong ganansya (tubo) at pampublikong interes o panlipunang pangangailangan. Sa kalagayang konsentrado ang pag-aari at kontrol sa likas na yaman resources sa kamay ng iilang mga monopolyo kapitalista -- ang nananaig ay ang pribadong interes nila sa halip na interes ng kabuuan o ng nakararaming mamamayan. Makikita ito sa papel ng transnational corporations (TNCs) at International Financial Institutions (IFIs) sa pagbabago sa klima at pag-init ng mundo.

Papel ng TNCs sa pagbabago ng klima

May tuwirang kontribusyon sa pagbuga ng GHGs ang TNCs sa pamamagitan ng kanilang kontrol o impluwensya sa kabuuang padron ng produksyon at konsumo sa lipunan: impluwensya sa mga patakaran ng gobyerno at multilateral institutions (international financial institutions) at impluwensya sa mga patakaran at programang tugon sa problema ng pagbabago sa klima.

Ayon sa ulat ng 1992 UN Centre for Transnational Corporations (UNCTC):

> "*The influence of TNCs extends over roughly 50% of all emissions of greenhouse gases. This includes about half of the oil production business, virtually all of the production of road vehicles outside of the centralized economies, most CFC production, and significant portions of electricity generation and use.*"

Ang global oil at gas industry ay dominado ng apat hanggang limang TNCs. Ang CO2 emissions ng Exxon Mobil at Gazprom noong 1997 ay mas malaki sa kabuuang CO2 emissions ng Indonesia, Malaysia, Thailand, Pilipinas, at Mexico,.

1. Kontribusyon ng TNCs sa pagbuga ng GHGs

- The production and use of energy-intensive metals are also largely controlled by TNCs. Around 30-40 TNCs dominate the exploration, mining, smelting, refining, and selling of metal concentrates and metals in the world market, with a trend towards increasing concentration in recent years [*Source: MMSD*]

- TNCs have now come to monopolize virtually the entire value chain of food production from farming to distribution, from seeds to fertilizers and equipment.

- "Globalisasyon": Northern TNCs outsource GHG emissions to the South. The GHG emissions generated by a US TNC that operates a manufacturing plant in China that exports all of its output back to the US would be counted entirely as GHG emissions from China.

- Around 8.9% of China's GHG emissions in 2005 was due to the production of goods destined for US consumption [*Source: Weber et al, 2008*]

- 35.4% of CO2 emissions from energy consumption in the Philippines in 2000 was due to production for export.

2. Impluwensya sa kabuuang padron ng produksyon at konsumo

Ayon sa isang 1992 UNCTC Report, "TNCs are also intimately involved with implementing and operating technologies which cause the problems that confront us... It is the international corporations which manufacture and market on such a large scale that, through their decisions, establish industry standards for production technologies, which are then replicated and dominate the industry."

Sa agrikultura:"nitrogen fertilizer production is also in the hands of TNCs which have historically promoted patterns of over-use, often in conjunction with government development schemes."

Sa transport: "big automobile producers in the US have discouraged both public transportation and non-fossil fuel based transportation, and continue to produce automobiles which are far less fuel efficient than available prototypes. "

Sa kuryente: "TNCs which play an important role in designing equipment and plants, have inappropriately placed priority on size rather than efficiency."

Ayon sa UNCTC, "Even when the TNC role is not dominant, it is difficult to identify any area of manufacturing in which TNCs do not play a significant role at some stage in the production-to-consumption process."

3. Impluwensya sa mga patakaran ng gobyerno

- Mining act
- Biofuels act
- Coal-fired power plants
- Chemical-intensive agriculture
- Lack of support for community-based adaptation (education, health, disaster-preparedness, R&D, etc.)

4. Impluwensya sa mga patakaran ng multilateral institutions at IFIs

The World Bank remains heavily committed to investments in carbon-intensive energy projects and reforms in energy sectors that focus on large-scale, privatised energy provision. From 1997-2007, the Bank financed 26 gigatons of CO2 emissions – about 45 times the annual emissions of the UK. [*Source: WWF-UK*]

This year World Bank Group's total lending to coal, oil and gas is up 94% from 2007, reaching over $3 billion. Coal lending alone has increased 256% in the last year. It reported lending over $2.5 billion for renewable energy and energy efficiency but the bulk of this went to large hydropower projects and supply-side energy efficiency. Only $476 million went to support "new" renewables such as wind, solar, biomass, geothermal, and hydropower projects that will produce up to 10 MW per facility.

On the WB as Climate Banker: The Bank is using Climate Investment Funds to push the neoliberal corporate agenda on climate change (carbon offsets, carbon trading, proprietary technologies, business-as-usual). This is a donor-driven scheme that places developing countries at a disadvantaged position and imposes new conditionalities on developing countries.

5. Impluwensya sa mga patakarang tugon sa pagbabago ng klima

Exxon Mobil funded network citizens' groups and bogus scientific bodies (after the IPCC was created) that have been publicly claiming that the science of global warming is inconclusive. [*Source: Monbiot, George, "The Denial Industry" The Guardian, Sept. 19, 2006*]

Corporate interests in the US have lobbied against the ratification of the Kyoto Protocol and watering down its content during negotiations (hence the introduction of market-based mechanisms: ET, JI at CDM). There are around 1,500 industry or corporate lobbyists.

The Corporate Message to the UNFCCC:

- That technology can fix the problem of global warming. AND that business, particularly the high-tech companies from the advanced and industrialized countries are the only ones or the best

ones that can deliver these solutions

.

- That mitigating or reducing GHGs and adapting or dealing with its adverse consequences will require vast amounts of money. And therefore private capital is necessary to provide the financing but as investments

.

- That if we want to change people's behaviour -- production and consumption patterns -- the best way to do it is through price incentives in the market.

- Climate policy (whether multilateral or domestic), should be aimed at enabling private capital to do its magic.

Ang resulta? Profit-oriented Climate Policy

- Carbon trading (EU-ETS, JI, CDM, etc.)
- Biofuels
- Carbon-capture and storage
- Nuclear energy
- REDD
- Geo-engineering
- At iba pa

EU-Emissions Trading Scheme. binigyan ng libreng mga permit to pollute ang malalaking kumpanya sa Europa, tapos pwede nila ito ibenta o bumili sa iba. Pwede rin mag-import na lang ng CERs mula sa CDM projects mula sa mahihirap na bansa.

Ano dapat ang ating tugon? Kilusang masa!

- Labanan ang mga operasyon ng mga TNCs at mga proyekto ng gobyerno na sumisira ng ating kabuhayan at kapaligiran, at singilin sila sa kanilang pananalasa

- Labanan ang mga patakaran sa ekonomya (neoliberal globalisasyon) na nagbibigay ng higit na laya sa pananalanta ng mga dayuhang monopolyo kapitalista (TNCs)

- Ilantad at labanan ang mga "market-based solutions" o ang business as usual approach sa climate policy

Dapat ipaglaban din ang sumusunod:

1. Demand shift of public resources away from military spending, debt payments and fossil fuel subsidies towards essential social services and adaptation support for vulnerable communities.

2. Demand drastic legally binding reductions in GHG emissions according to the principle of CDR&RC

3. Demand liability payments/compensation from those principally responsible for destroying the climate and ecology, and violating human rights

Ang Sagutin ng Gobyernong Arroyo sa Kalagayan ng Bansa sa Pinabilis na Pag-init ng Mundo

Ms. Frances Quimpo
Executive Director
Center for Environmental Concerns-Philippines

Ang pinabilis na pag-init ng mundo ay mauugat sa pag-balot/pagkulob ng init sa daigdig dulot ng malalaking pag-buga ng greenhouse gas emissions (GHG) ng malalaking industrialisadong bansa.

Ilang punto sa siyensya. Una, natural na kaganapan ang pagbabago ng klima, ang usapin ngayon dito ay ang pinabilis na pag-init ng daigdig dulot ng anarkikong pro-duksyon at labis-labis na konsumo sa ilalim ng sistemang kapitalista.

Pangalawa, may mga tampok na epekto ang pinabilis na pag-init ng daigdig. Ang dapat nating tingnan ay hindi pare-pareho ito sa bawat bansa o lugar sa daigdig, hindi rin pare-pareho ang epekto sa mga uri sa lipunan ng daigdig.

Bagamat ang mga malalaking kapitalistang bansa ang may sanhi ng pinabilis na pag-init ng daigdig, hindi sila ang malubhang tinatamaan ng epekto nito. Sila pa rin ang nagtatakda ng paraan kung paano sosolusyunan ito.
Ilang punto sa politika at ekonomya aspeto ng pinabilis na pagbabago ng klima: una, dahil taliwas sa tubo ang pag-gastos para sa kapakanan ng mamamayan at kalikasan, hindi nila ito masosolusyunan. Kasabwat ng malalaking kapitalistang bansa ang mga gobyerno ng maliliit na bansa sa pagpapalala ng kalagayan ng mamamayan sa gitna ng pag-init ng daigdig, pagpapanatili ng mga pata-karang neoglobalisasyon, pagpapanatiling atrasado ng bansa, at matinding korapsyon.

Ito ang mga hakbangin ng nakaraang mga pamahalan ng Pilipinas kaugnay ng pagpapabilis ng pag-init ng daig-dig:

- Created the Inter-Agency Committee on Climate Change (IACCC) by virtue of Presidential A.O. 220 on May 8, 1991
- Signed the UNFCCC on June 1992 and ratified it on August 2, 1994
- Signed the Kyoto Protocol on April 15, 1998 and rati-fied it on November 20, 2003
- Issued Executive Order No. 320 on June 25, 2004, designated the DENR as the National Authority for (Clean Development Mechanism) CDM
- Issued DENR Adm. Order 2005-17 last August 2005 on the Implementing Rules and Regulations Govern-ing E.O. 320
- Arroyo issued Executive Order 774, reorganizing the Presidential Task Force on Climate Change (PTFCC). Arroyo appointed herself as the new chair-person of the said Task Force
- House Bill 5982 creating the Climate Change Com-mission, emphasized the necessity of having a na-tional framework program on climate change through the establishment of the commission; commission, with a chairman and two commissioners appointed by the president; will also recommend possible legisla-tion and policies on climate change and represent the Philippine government in all international and regional meetings on the subject

Ito ang mga sagutin ng pamahalaang Arroyo:

- Pagpapaubaya sa dayuhang korporasyon sa mga kinakailangang serbisyo publiko at panlipunan
- Pagsasapribado ng pagpaplano, disenyo, maging ang adaptation sa pagbabababago ng klima – na nag-babaon sa atin sa utang.

- Pagbubukas ng ating natural na yaman sa pandarambong ng dayuhan

- Defaulted on actively raising income levels, production subsidies, price controls, education and technical skills, food distribution, health care, and disaster preparedness.

- Neglected the most economically and climate-vulnerable sectors such as the poorest sections of the peasantry, namely small-scale farmers, small-scale fishers, indigenous peoples, mountain and forest people, upland farmers, pastoralists, including the urban poor

Ang ating mga tungkulin:

- Malawakang edukasyon sa mamamayan: pagpapaunawa sa Pinabilis na Pagbago sa Klima at tunay na ugat ng suliraning ito

- Paghandaan ang epekto ng pinabilis na pag-init ng daigdig

- Makisangkot sa mga lokal, pambansa at internasyunal na pakikipagtalastasan sa usaping ito

- Malawakang pagpapakilos laban sa imperyalistang globalisasyon at para sa hustisyang panlipunan, tunay na kaunlaran at pamahalaang MAKABAYAN.

SUMMARY OF WORKSHOP PRESENTATIONS

A. Upland Communities, Flash Floods, and Landslides

Mr. Ricarido M. Saturay, Jr.
Geologist and Coordinator for Training and Community Services, CEC-Phils

Ang flashflood ay ang biglaang paglaki at pag-apaw ng tubig sa isang ilog patungo sa karatig na mababa o patag na lugar

Paano nagkakaroon ng flashflood?

Biglaang malakas na pag-ulan: Dahil sa biglaang malakas na ulan, ang ibabaw ng lupa ay mabilis na napupuno ng tubig lumiliit ang tubig na kayang tumagos sa ilalim ng lupa at masipsip ng mga ugat ng halaman. Mabilis na lumalaki ang tubig na mapupunta sa mga sapa at ilog

Biglaang pagtagas ng naipong tubig sa kabundukan: Ang dam ay maaring natural (landslide o log jam na nagbara sa ilog) o artipisyal na istruktura na naglilikha ng law a sa kabundukan.

Biglaang paglipat ng aktibong channel (o daluyan) ng ilog: Kapag malakas ang agos ng tubig sa ilog, maaaring mag-iba ng dinadaluyan ang tubig, at pumunta ito sa lugar na hindi karaniwang dinadaluyan ng ilog. Kadalasang nangyayari ito sa alluvial fan (bahagi ng ilog na nasa hangganan ng matarik na kabundukan at ng kapatagan) at alluvial plain (kapatagang binabagtas ng malaking ilog).

Iba pang salik:

Pagkasira/pagkaubos ng kagubatan: Kapag nasira o nawala ang kagubatan, walang mga puno at halamang nagpapabagal sa pagbagsak at pag-agos ng ulan sa lupa. Sinisiksik ng direktang patak ng ulan ang ibabaw ng lupa at lumiliit ang tubig na kayang tumagos sa ilalim ng lupa. Kung walang mga punong sisipsip ng tubig mula sa lupa, mabilis na lumalaki ang tubig na mapupunta sa mga sapa at ilog at naglilikha ng flashflood.

Matarik na watershed: Kadalasang nangyayari ang flashflood sa mga ilog na nasa matatarik na lugar (hal. Kabundukan). Kapag mas matarik ang kalupaan, mas mabilis na nakakababa ang tubig patungo sa mga ilog at sapa.

Dami ng ilog sa watershed: Kapag mas maraming ilog sa watershed, mas mabilis na nakakababa ang tubig at mas malaki ang pagbabaha.

Mga dapat isaalang-alang sa panganib ng flashflood:

- Mabilis na rumaragasa
- Maaaring di sapat ang panahon para lumikas
- Kadalasang may dalang putik, buhangin, bato, at/o puno
- Mas may kakayanang tumangay (highly erosive) kaysa bahang kalakhan ay tubig lamang.
- Maaaring mabaon sa mga ito paghupa ng baha
- Malayo ang nararating
- Malaw ak na apektadong lugar
- Maaaring makaranas ng flashflood ang lugar na hindi nakaranas ng malakas na ulan.
- Madaling magbago ng active channel ang flashflood
- Maaaring magdulot ng landslide ang flashflood dahil sa pag-uka ng mga matatarik at matataas na pampang ng ilog

Ano ang landslide?

Ang landslide ay ang paggalaw ng mga bato, bu-

hangin, putik at/o lupa pababa ng isang slope.

Ang paghila ng gravity ang pangunahing dahilan ng landslide. Maaring mabagal o mabilis ang paggalaw.

Ang paraan ng paggalaw ay bilang:

- Isa/ilang malaking tipak o bloke (block failure)
- Buhaghag at tuyong pag-agos (dry flow o avalanche)
- Buhaghag at may kahalong tubig (wet flow o debris flow)

Paano nagkakaroon ng landslide?

- Ang timbangan ng pwersa ay naaapektuhan ng Pressure ng tubig sa loob ng slope
- Pagyanig
- Tibay (strength) ng bato o lupa
- Pagkakaroon ng mga bitak o puwang (discontinuities) na maaaring pagdulasan ng bato o lupa at ang katangian ng mga ito
- Tarik at taas ng slope
- Dagdag na bigat sa slope
- Pagbabago sa tarik ng slope
- "Anchoring" ng mga ugat ng puno

Mga dapat isaalang-alang sa panganib ng landslide:

- Saan maaaring mag-landslide?
- Kailan nagkakaroon ng landslide?
- Laki ng landslide (magnitude)
- Mas malaki at mas mabilis ang landslide, mas malaki ang lugar na maaapektuhan
- Dalas ng pag-landslide (frequency)
- Mas malaki, mas madalang
- mas maliit, mas madalas
- Bilis ng landslide (velocity)
- Mas mataas at mas matarik ang pinanggalingan, mas mabilis
- May nakikita bang mabagal o maliitang paggalaw ng slope ilang oras o araw bago magkaroon ng malaking landslide?
- Pinakamalayong maaabot ng landslide (runout)
- Mas mataas at mas malaki, mas malayo ang maaabot
- Aabutan ba ang komunidad?

Inaasahang magiging mas madalas at/o malawakan ang mga flashflood at landslide dahil sa climate change. Nangangahulugan ito ng mas malaking panganib sa mga mahirap na komunidad na nasa kabundukan o matataas na lugar at sa iba pang sektor na bulnerable sa naturang mga panganib. Ang mga polisiya, programa at proyekto ng gobyernong sumisira sa mga kabundukan at kagubatan ay higit na magpapalala sa epekto ng climate change.

Pagtugon sa Panganib

- **Hazard mapping**
  Saan maaaring maganap ang flashflood o landslide? Gaano kadalas? Gaano kalaki? Aling mga lugar ang pwedeng maapektuhan?

- **Hazard monitoring**
  - Landslide
    Ano'ng kondisyon ng pag-ulan ang nagdudulot nito? (rain gauge network)
    Pag-rekord sa mga depormasyong nagaganap sa kalupaan
  - Flashflood
    Ano'ng kondisyon ng pag-ulan ang nagdudulot nito? (rain gauge network)
    Ano ang palugit na panahon sa pagitan ng peak rainfall at peak flow? (rain gauge at stream gauge network)

- **Hazard warning**
  Nakabatay sa resulta ng mapping at monitoring at pagpapaabot ng impormasyon para sa pagpili ng akmang aksyon batay sa antas ng panganib

- **Hazard mitigation**
  - Structural: Slope and bank protection; drainage improvement; bioengineering
  - Non-structural: Appropriate land use, Rehabilitation/protection of forest lands and watersheds

- **Vulnerability reduction and capacity-building**
  - Improve livelihood and promote welfare of vulnerable communities
  - Instill awareness of hazards
  - Develop organizational capability in CBDM

B. Climate Change, Fisherfolks, and the Coastal Community

Mr. Vince Cinches
Executive Director,
Central Visayas Fisherfolk Development Center (FIDEC)

Among the issues and concerns raised in this presentation are:

- Community Awareness on Climate Change and it's impacts
- Impacts of responses of Coastal Communities to Climate Change
- Local Discourse and International Communities
- Perspective for a more community responsive and binding climate change policies

Center of the Center

Scientists have described the Philippines as the center of the center of marine shorefish diversity with the "richest concentration of marine life on the entire planet." (Carpenter and Springer, 2005). The population is highly dependent on marine fisheries as source of animal protein and livelihood. Some figures:

7,100 islands
226,000km^2 coastal water
1.93 million km^2 oceanic waters
36,289 km discontinuous coastline
64 (out of 79) coastal provinces
832 (out of 1,541) coastal municipalities

According to the Philippine Environment Monitor, 2005: "Climate change, which may lead to sea level rise and possible increases in storm frequency and strength, could have major impacts on Philippine marine and coastal resources, especially coral reefs, fisheries and the community they support."

Historic correlation between C02, temperature

Worldwide, marine and freshwater fisheries generate over US$130 billion annually, employ at least 200 million people, and feed billions of people reliant on fish as an important source of protein.

Atmospheric carbon concentration will lead to warm seawater which will lead to decline of marine species and coral bleaching. Hotter water means less food, less offspring and even less oxygen for marine and freshwater fish populations, since the amount of oxygen dissolved in water decreases as temperatures rise.

This situation is exacerbated by other factors such as the presence of reclamation projects, use reclassification and privatization of waters, illegal fishing, eco-tourism, offshore mining, corporate fishing, offshore mining, corporate fishing, exclusive resource managements, and anti-people state fishing, marine and aquaculture policies.

Impacts on Philippine Coastal Environments

"The coastal are the natural crossroads between human activity and the sea." (Weber 1993). As an archipelagic nation, the Philippines is essentially one big coastal zone. Impacts on coastal resources may be felt from activities conducted at the highest mountain peak to the coastal and marine waters. Human impacts on coastal resources in the Philippines continue to intensify as increased population pressure on land and in the sea are degrading fisheries, coral reefs, and mangrove areas that serve as the basis for food security, economic development, and biodiversity conservation.

Coastal resource management (CRM) is above all else managing people and human activities so that their negative impacts on the coastal environment are minimized. It is a dynamic process that seeks to rationalize the use and development of coastal resources to ensure that present human needs are provided while coastal environments and habitats are protected and managed for future and sustainable use.

The Fourth Assessment Report of the Intergovernmental Panel on Climate Change states that warming of the climate system is unequivocal, as is now evident from observations of increases in global average air and ocean temperatures, widespread melt-

ing of snow and ice, and rising global average sea level.

Natural systems, including oceans and coasts, are being affected by regional climate changes, particularly by temperature increases. Besides rising surface water temperatures and sea level, impacts are or will be associated with changes in the wave climate, circulation, ice cover, fresh water run-off, salinity, oxygen levels and water acidity.

Shifts in ranges and changes in algal, plankton and fish abundance have already been observed in high-latitude oceans. Sea level-rise is negatively contributing to coastal erosion, losses of coastal wetland ecosystems, including salt marshes and mangroves, and increasing damage from coastal flooding in many areas.

These effects will be exacerbated by increasing human-induced pressures on coastal areas.

Warm Water / Temperature Rise will affect coastal ecosystems in various ways: calcification & coral bleaching, death and migration of fishes, change of sea currents, rising sea levels & evacuation, retreating coastlines, dead zones in fishing grounds, collapse of marine environments, extreme weather, environmental refugees, invasion of species and salt water intrusion.

Corals are beautiful living animals that are enjoyed by millions of snorkelers and divers world wide, but they are also of vital importance for the whole coral reef ecosystem and for coastal fisheries. With melting sea ice and warming of the oceans, marine species change their distributions, affecting entire food chains and ocean productivity. In 2005 the subtropical dinoflagellate *Ceratium hexacanthum* was found in CPR samples from the North Sea at levels that were 6 standard deviations above previous measurements since 1958. Further evidence of this warning signal is seen in the appearance of a Pacific planktonic plant (a diatom *Neodenticula seminae*) in the Northwest Atlantic for the first time in 800,000 years, by transfer across the top of Canada due to the rapid melting of Arctic ice in 1998.

If this ocean conveyor belt slows down or changes as a result of melting ice and increasing ocean temperatures, the impacts on marine life may become severe.

C. Climate Change and its Impacts on Agriculture

Dr. Lourdes Tibig
Climate Data Section Chief
Philippine Atmospheric, Geophysical and Astronomical Services Administration (PAGASA)

Dr. Tibig's presentation focused on reviewing the trends in climate changes in the Philippines and the projected impacts of these changes in climate extremes.

Known impacts of climate change extremes include temperature increases beyond a threshold can affect key development stages of some crops, spikelet sterility in rice, loss of pollen viability in maize, tubers' development in potatoes, sever yield losses if temperature exceeds critical limits for even shorter periods, and increased flood, landslide, mudslide events (and damages). Some ecosystems show effects quickly (ex. coral bleaching can occur in a single exceptionally warm season); and changes in the frequency of extreme events may disrupt some ecosystems as a result of differences in response times of species.

Not adequately known are the effects of climate change on pest infestations and the ability of livestock to adapt to physiological stresses on aggregated market sector effects (changes in GDP).

Documentation (done in 2000) of impacts of extreme climate events (ECEs) showed a very clear link between ECEs and adverse impacts on agriculture, water and coastal resources, health and environment, including disaster management. Preliminary vulnerability and adaptation (V & A) assessments in 5 most important sectors (agriculture, water and coastal resources, human health and forestry) already indicated high vulnerability to adverse impacts of climate change. There is a lower capacity to adapt due to lack of financial, institutional and technological resources.

Focusing on agriculture and food supply is the impact of too much or too little rains. One tonne of imported rice can emit 1000 tonnes of H2O in the process. High temperatures, spikelet fertility, and pest and diseases, are expected to add to the vulnerabilities of the agricultural sector. The most fundamental of human needs (food) is at great risk.

What would climate change mean in the long term?

- Freshwater availability in Southeast Asia to decrease along with population growth and increasing demand arising from higher standards of living, could adversely affect millions by 2050;
- Coastal areas especially heavily-populated megadeltas will be at greatest risk due to increased flooding from the sea, and in some flooding from the rivers;
- Risk of hunger is projected to remain very high in several developing countries (decrease in crop yields);
- Endemic morbidity and mortality due to diarrheal disease (primarily associated with floods and droughts are expected to rise due to projected changes in water cycles;
- Increases in coastal water temperature would exacerbate the abundance/toxicity of cholera.

Climate change is expected to impinge on the sustainable development of most developing countries of Asia as it compounds pressures on natural resources and the environment. To prevent a global temperature rise above 2oC, carbon dioxide concentration in the atmosphere has to be stabilised in the range 450 or 550 parts per million (ppm). Current CO2 concentration is 380 ppm and has risen by around 100 ppm since the 1800s.

SUMMARY OF PRESENTATIONS FOR THEMATIC WORKSHOPS

WORKSHOP ON CLIMATE CHANGE IMPACTS AND RECOMMENDED SURVIVAL STRATEGIES/ SOLUTIONS

20 April 2009

Workshop Group 1: **Upland Communities, Flashfloods and Landslides**

Facilitator	Joana Jaime
Resource Speaker	Ric Saturay, Jr.
Reporter	Rolando Libang
Documentation	Reynold Luna

The group was composed of representatives from indigenous peoples, women, peasant, scientists, transport, Church organizations.

In response to the question of what changes were perceived in their respective communities in relation to climate change, individuals noted the following:

- Stronger typhoons, heavier rains, and stronger winds resulting in flash floods and frequent landslides during the rainy season
- Unpredictability of rainy and summer seasons
- Effects of mining operations in upland river ecosystems, such as the rapid rise of water level in Sipalay river during rains, seen to be related to the dumping of wastes by mining companies in the river

Participants said that communities were affected through the following means:

- Deaths, drowning, and diseases associated with extreme weather
- Destruction of homes, roads, schools, bridges, similar infrastructure and farming areas
- Evacuation from affected communities
- Increase of incidence of diseases such as dengue
- Loss of food sources and income for basic needs
- Inaccessibility and isolation of communities
- Destruction and massive inundation of farming crops
- Collapse of riverbank infrastructures and land
- Loss of domestic and agricultural animals
- Limited access to river systems for domestic use

Participants identified the following impending threats related to climate change:

- Further decline of food security
- Loss of indigenous knowledge and practices for conserving natural resources and developing agriculture
- Increasing impacts of mining
- Displacement of communities

The group proposed the following adaptation measures in response:

- Rehabilitation of damaged and degraded mountains, forests, and river systems affected by large-scale mining operations
- Enhancing disaster preparedness at the community level through government services and education
- Relief operations for calamity victims
- Help and support for strengthening and nurturing indigenous knowledge and practices on the preservation of forests and agriculture
- Promotion of the use of traditional crop varieties, soil-appropriate and pest-resistant indigenous species

Workshop Group 2:
CLIMATE CHANGE, FISHERFOLKS, AND COASTAL COMMUNITIES

Facilitator	Vince Cinches
Resource Speaker	Vince Cinches
Reporter	Aubrey Verzosa
Documentation	Michael M. Ong

Comprised of representatives from regional fisherfolk, peasant, and environmental organizations, the groups outlined various issues which had effects on the adaptation capacity of communities, including the following:

- Stronger waves due to stronger *amihan* winds
- Perceived and expected rise in sea levels
- Decreasing yields and/or changing of habitats of local seafood species
- Changing and unpredictable weather patterns which affect the livelihoods and yields of fisherfolk and farmers.
- Shifts in livelihood; farmers also resort to fishing in cases where drought or lack of irrigation facilities has caused crops and lands to dry out
- Effects of hazards such as landslides and flashfloods
- Contamination of fishing grounds and freshwater sources and fish kills due to waste pollution and chemical waste disposal in waterways, construction of coal power plants, and contamination emanating from mining operations
- Loss of marine biodiversity
- Impacts of development projects on coastal communities and coral reefs, such as nuclear power plant construction (Bataan), resort and tourism facilities, ang large-scale mining, bridge construction
- Endangered species, such as *pawikan*
- Impacts of practices such as dynamite fishing, which impoverished fisherfolk are sometimes forced to resort to

Problems encountered by local communities in relation to climate change included the following:

- Declining fish production due to the progressive destruction and depletion of corals and mangrove areas which serve as fish breeding grounds near shorelines. This is especially worse in mining areas due to chemical contamination and in areas affected by commercial fishing, dynamite fishing, aquaculture, conversion, reclamation projects and tourism.

- Species migration and depletion occurs due to climate changes and disturbances in the natural habitats of aquatic organisms. This will affect fisherfolk in terms of increasing costs of production as they have to fish in deeper waters to get the same amount of catch. This makes them vulnerable to disasters due to the long distances they travel.

- Salt water intrusion

- Receding shorelines will affect residential areas along coastlines due to vulnerability to storm surges. Offshore mining projects in areas such as Cagayan also exacerbate this problem.

Among the solutions and responses discussed, the group emphasized the value of an information and education campaign for grassroots communities as a means for building people's capacity, in addition to community mobilization and organizing. Participants affirmed that education is the solution to understanding climate change and protecting the environment. Monitoring of critical issues and locations is needed. They also asserted that people who know about climate change should also organize themselves and that the government's actions should be monitored. Policies which destroy the environment and fisherfolk communities' livelihoods should be exposed and changed, and new policies or legislation on fisheries must be proposed. The group noted that it is also critical to change the current system of governance under the Arroyo administration.

Workshop Group 3:
Climate Change, Agriculture, and Food Security

Facilitator	Clemente Bautista, Jr.
Resource Speaker	Dr. Lourdes V. Tibig
Reporter	Lorie Beyer
Documentation	Mediosa Montereal

The group was facilitated by Mr. Clemente Bautista, Jr. of Kalikasan People's Network for the Environment. Resource speaker was Dr. Lourdes V. Tibig.

Composed of national organizations and NGOs based working the peasant, rural women, IP, and labor sectors, the workshop group outlined various issues exacerbating the vulnerabilities and adversely affecting the capacity of communities to adapt to the impacts of climate change on agricultural production and food security. These included:

- The lack of access to adaptation technologies and lack of capacity to sustain resources for agricultural production (e.g. lack of lands to till, irrigation sources, seeds)
- Land grabbing and crop conversion, particularly with regards to the government's promotion of agrofuel plantations
- Effects and persistence of chemical-based agricultural practices
- Ecological effects of particular projects on agricultural areas, such as coal mining and coal-fired power plants
- Militarization of rural and farming communities

The group recommended various measures to help build the capacity of rural communities:

- Systematic and wide-reaching environmental education and information campaign among mass organizations and use of creative learning materials on climate change.
- A campaign to seek the repeal or scrapping of Republic Act 7942 (The Philippine Mining Act of 1995) and Republic Act 9637 (The Philippine Biofuels Act of 2006) in light of their impacts on agricultural communities
- Strengthening of issue-based campaigns against Philippine coal-fired power plants, coal mining, agrofuel plantations, genetic engineering and hybrid rice varieties, crop conversion, illegal logging, and militarization of communities.
- Conducting legislative actions in support f House Bill 3059 (Genuine Agrarian Reform Bill), log bans in selected areas, and proposal of legislation on food security
- Conductingresearch on adaptation strategies, including grassroots-based adaptation and mitigation techniques and appropriate technologies, and vulnerability assessments at the community level.
- Provision of specific programs and services in support of reforestation, sustainable agriculture, and alternative livelihood generation in rural areas

Workshop Group 4:
Effects of Climate Change on Urban Community Health

Facilitator	Jess Abraham, Dr. Julie Caguiat
Reporter	Terence Krishna Lopez
Documentation	Jose Leon Dulce

The workshop group was comprised of representatives from health workers, urban poor, Church, and women organizations and facilitated by Dr. Julie Caguiat of the Community Medicine Foundation (COMMED) and Mr. Jess Abraham.

Participants listed changes in their respective communities which they perceive as related to the impacts of climate change, including:

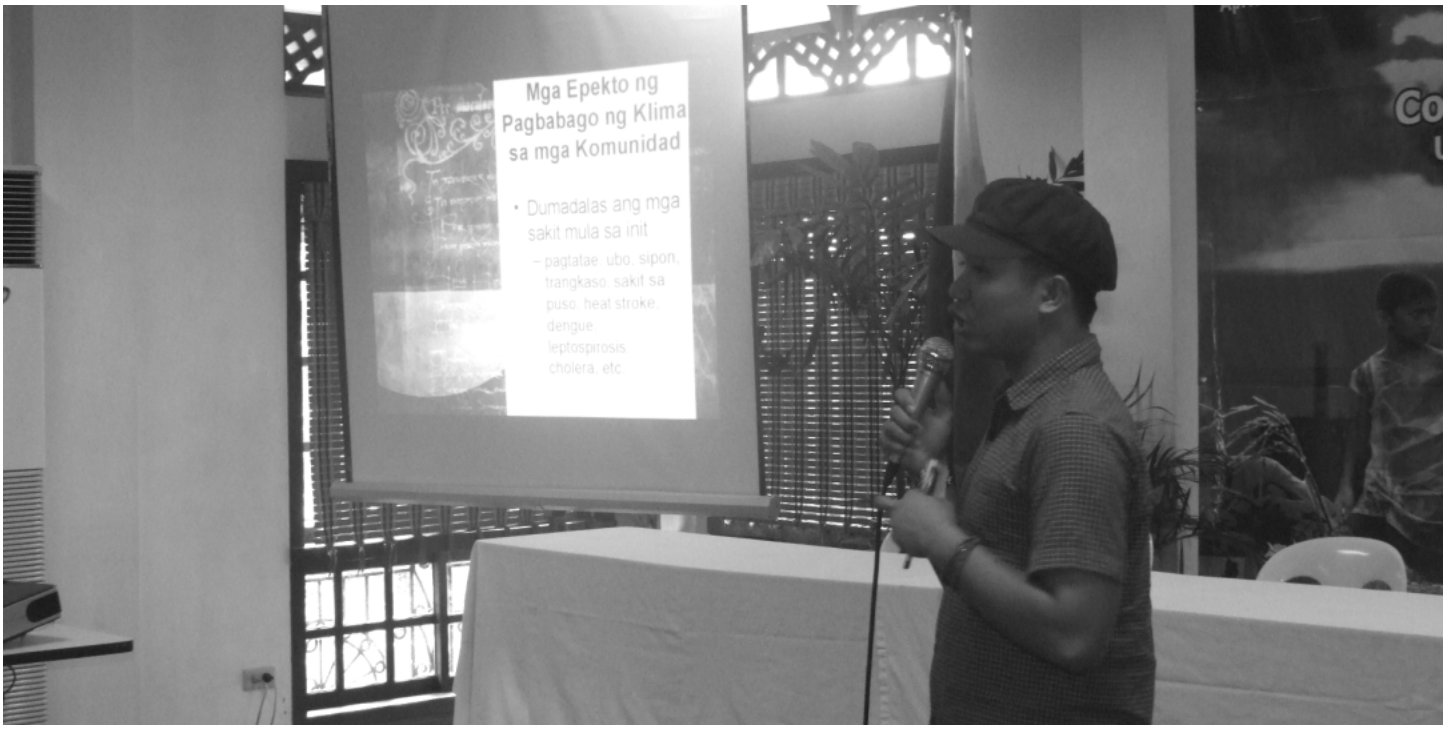
- More cases of extreme temperature such as intense heat and cold spells and more humidity
- Extreme weather events (typhoons, in particular) occurring in regions/provinces where they did not occur before
- Increase of insect populations
- Increase of diseases, such as diarrhea, cough, influenza, cardiac diseases, heat stroke, dengue, leptospirosis, cholera, etc.
- Effects of declining tuna industry (General Santos City) on livelihood of communities
- Correlation between disease and increased poverty and hunger
- Inaccessibility and unaffordability of health services

The group categorized various threats that climate change impacts could bring into three types:

- Increased severity and frequency of different epidemics
- Aggravated loss of livelihoods
- More cases of hunger and mortality

The group listed the following steps which should add to the solutions and responses to climate change impacts:

- Launching of a broad campaign on climate change
- Raising consciousness among communities through educational work, discussions, and information drives
- Community and volunteer organizing and mobilization
- Organizing activities and services with citizen and community participation, such as clean-up and health drives



SUMMARY OF PRESENTATIONS FOR THEMATIC WORKSHOPS

WORKSHOP ON STRATEGIES FOR ADDRESSING THE IMPACT OF CLIMATE CHANGE

21 April 2009

Workshop Group 1:
CAMPAIGN AND ADVOCACY

Facilitator: Clemente Bautista, Jr.
Reporter: Mila Elle
Documentation: Reynold Luna

The group was composed of representatives from both national and regional-based people's organizations from the peasant, indigenous peoples, civil society, environmental, and women sectors.

It identified the following national issues of concern which may be translated into actual campaigns: air pollution, waste management, the Bataan Nuclear Power Plant (BNPP) revival, food security, and pollution of Manila Bay.

The group also identified regional issues and/or concerns which may be supported and projected at the national level:

- Campaign against mining liberalization and large-scale mining projects
- Coal-fired power plant construction (Iloilo, Central Visayas, Far South Mindanao region, Misamis Oriental)
- Large dams, off-shore mining exploration (Bicol, Visayas regions)
- Logging (CARAGA, North Quezon)
- Floods and landslides
- Waste and air pollution (National Capital Region)
- Marine pollution (Sorsogon and Samar)
- Illegal fishing
- Land use conversion (Bukidnon and Visayas)
- Environmental impacts of the Philippine National Oil Corporation project (Sorsogon)
- Militarization of communities
- Health and livelihood

The group identified the following strategies and outputs under the categories of Education and Information, Training, Research, and Mobilization:

A. Education and Information

Doables under a time frame of one year

- Primer on the issues of agrofuels, coal-fired power plants, and offshore mining in the Visayan sea
- Visual and learning aids designed for community use
- Development of educational materials on climate change issues, such as videos
- Education and lobbying with local government units (including the use of Memorandum of Agreements and Resolutions)
- Promotion and education work through mass media, such as radio broadcasts (such as the radio program of CDRC)
- Photo-exhibits
- Targets for the long-term continuous information, education, and campaign work
- Community-based monitoring on climate effects and disaster preparedness

B. Training

For the first year, organizations and PCWA can target a Training of Trainers on Climate Change and replicate visual aids for communities.

C. Research

The following research outputs were suggested to be doable within the first year of the Conference:

- Vulnerability Assessments
- Mapping of geohazards
- Water Analysis (PNOC drilling impacts)
- Researches on food security
- Community-based climate change adaptation and mitigation measures

The following research projects were also suggested in the long-term:

- Community-based researches by regional formations of PCWA
- Broad dissemination of research outputs in orientation seminars and an information and lobbying drive
- Community-based research and development of agricultural products resistant to landslides
- Use of coconut plants as anti-pollutants
- Compilation, critique and analysis of existing studies on climate change
- Special weather forecasting strategies in the peasant sector
- Forest cover monitoring

D. Mobilization

- The following activities and coordinated campaign actions were targetted:
- April 22: Earth Day
- March 3: Commemoration-protest of the Mining Act of 1995 (RA 7942)
- March 14: Protest against large dam projects
- June: Soccsargends Regional Forum on Dirty Energy
- June 5: Coordinated filing of legal cases on Climate Change in Cebu, Iloilo, national
- July: Campaign on Health and Climate Change in Central Visayas
- October: Campaign against Agrofuels during World Foodless Day
- Continuing Campaign against the BNPP revival
- Regional and Provincial Conferences on Climate Change
- National Conference on “Dirty Energy Technology”
- Filing cases against TNCs operating in the Philippines

Workshop Group 2: LEGISLATIVE LOBBYING

Facilitator:	Vince Cinches
Documentation:	Feny Cosico

The workshop group was composed of representatives from national people's organizations and regional networks and mass organizations.

The group agreed that there is a need to review Republic Act 7942 (Philippine Mining Act of 1995) and draft an alliance statement on energy development programs and policies of the Philippine government.

The group identified the following laws/policies which should be repealed/scrapped in light of their impacts on communities:

- Comprehensive Agrarian Reform Law
- Philippine Mining Act of 1995 (destruction and dislocation of IPs)
- Fisheries Code
- Presidential Degree 87 (Oil and Gas Petroleum Act)
- Indigenous People's Rights Act (stand of representatives from KAMP, MASAKA, KALUMARAN-Mindanao, KMP)

The group identified several policies which need to be supported further through legislative efforts and action:

- Genuine Agrarian Reform Bill
- People's Mining Policy of Defend Patrimony alliance
- Genuine Fisheries Code
- Oil regulation legislation
- Climate Change adaptation and mitigation measures

In light of the upcoming 2010 national elections, the group also identified the following issues and courses of action in relation to the electoral agendas being forwarded by people's organizations:

- Electoral candidates position on Charter Change and national patrimony
- Environmental Vote platform
- Call to stop logging concessions in Mindanao

Workshop Group 3: INTERNATIONAL SOLIDARITY WORK

Facilitator:	Frances Quimpo
Reporter:	Jill Carino
Documentation:	Lisa Ito

Mostly composed of regional organizations, networks, and mass organizations, the workshop group identified the following environmental issues related to climate change impacts which may be potentially projected at the international level:

- Campaign against genetically modified organisms (GMO) monopoly of seeds and policy aspects of GMO introduction and importation in the Philippines (particularly rice and corn) . GMO's various effects have ranged from land and soil degradation, added costs for farmers for seeds and inputs, and degraded biodiversity (Negros).
- Combined effects of mining, exacerbated by climate change, on Philippine communities, such as the pollution of coastlines and adverse effects on agricultural communities.
- Projection of traditional and indigenous practices and knowledge in agriculture and forestry as alternatives (Cordillera/indigenous peoples)
- Impacts of agrofuels projects in the Philippines
- Links and contributions of big business and transnational corporations (TNCs) to global warming and greenhouse gas emissions

The group also identified the following provincial and regional campaigns which could be potentially projected at the international level:

- In Soccksargen region: project-specific campaigns against Sagitarrius Mines, Inc. mining project, coal mining, coal-fired power plant construction by the Alcantara family and a Thai-based firm in Sarangani province, and agricultural plantations.
- In Isabela/Cagayan Valley: updates on the successfull campaign against coal mining in Isabela (concessionaire area decreased)
- Misamis Oriental: construction of coal-fired power plants, incidecen of flashfloods in Salvador and local campaign against Hanjin

Forms of international networking and linkage strategies identified by the group were:

- Production of press releases, fact sheet, short releases, petition letters for release to international networks, institutions and media.
- Hosting of foreign visitors/study tours/ exposurees on issues of land grabbing and mining and their relation to climate change.
- United Nations Climate Change Conference (COP 15) in Copenhagen
- Our World is not for Sale activities
- Ibon International-People's Protocol on climate change
- Global Legal Action on climate change organized by Atty. Oposa

Support for the following direct actions/internationally-coordinated mobilizations were identified:

People's Action on Climate Change (PACC): a week-long event in Bangkok, Thailand from October 1-5 2009 by Asian grassroots organizations which aims to be a venue for solidarity among Asian climate activists and people's movements.

Among the the PACC activities are an exhibits of climate change educational materials/IECs and alternative community-based technologies, Asian Womens Quilt project, fluvial parade, simultaneous sectoral workshops, and a one-day conference of Asian people's movements and mobilization. An e-group for coordination purposes will be formed.

Unity Statement
Philippine Climate Watch Alliance (PCWA)

The world is in the middle of an environmental crisis: an unprecedented rise in global warming primarily induced by increasing concentrations of man-made greenhouse gases (GHGs) in the atmosphere. The situation is aggravated by the massive, rapid and relentless destruction of the earth's forests which act as natural carbon sinks.

The impacts of climate change are now bringing suffering to peoples around the world, especially in impoverished communities, who have little means to cope with the environmental, economic, and social changes related to global warming. These impacts include the rise in severity and frequency of extreme weather events (such as typhoons, hurricanes, and floods), epidemics and waterborne diseases, freshwater scarcity, and alterations or destruction of natural habitats and biodiversity.

The Kyoto Protocol, a landmark international agreement on climate change, was instituted in 1998 to reduce GHG emissions and propose mitigation and adaptation measures. Yet, a decade after its ratification, the Kyoto Protocol has failed to achieve significant reductions in GHG emissions due to low targets, flawed mechanisms, and lack of political will to cut down emissions, most especially the US. The Kyoto Protocol's accommodation of market-based mechanisms have produced little in terms of actual reduction and has served as a convenient excuse to maintain the global order of overproduction by developed countries and TNCs.

In light of the Protocol's failure, the United States and a few other countries are opposing the formulation of new and more binding international agreements to significantly reduce global GHG emissions in the next decades.

The Philippines is among the countries most vulnerable to the impacts of global warming. Majority of the population barely earn enough for their basic needs and lack the socio-economic capacity to cope with the impacts of climate change on communities, such as tragedies caused by 'super typhoons' and record-breaking temperature extremes.

The Philippine government lacks policies and programs that genuinely mitigate climate change and help communities adapt to its impacts. The Arroyo administration promotes and pursues globalization-oriented policies in strategic sectors, such as energy, mining, forestry, agriculture, and trade, which will increase the country's GHG emissions and will render it more vulnerable to the impacts of climate change. Its strategic energy program, for instance, mandates the installation of more private coal power plants while these are being phased-out elsewhere. At a time of rising hunger rates, the state's priority program of promoting massive agrofuel production threatens food security and agricultural self-sufficiency. Chronic deforestation is also promoted through state-sanctioned large-scale mining and logging projects.

In this light, we from the Philippine Climate Watch Alliance, comprising members of Philippine people's organizations, non-government organizations, community organizations, scientific community and environmental advocates declare our unity and principles on the issue of climate change and global warming.

We believe that global warming goes beyond an environmental concern: it is an issue of political and economic justice at the global scale. We believe that it is rooted in the unsustainable, wasteful and profit-oriented production of the world economy, where developed countries with their TNCs extract, produce, and consume carbon-based fuels to an unsustainable degree. This economic system

is kept in place by neo-liberal policies promoted by developed countries, export credit agencies, and international financial institutions (IFIs).

We believe that any genuine move to resolve the problem of global warming must critically recognize and address the larger socio-economic context in which it occurs.

Lastly, we believe that decisions and actions which the international community along with the Philippine government will eventually make should primarily consider and uphold the interest and welfare of the majority of our people and the environment.

As an alliance, we assert our position and calls:

1.At the global level, we unite with other similarly situated peoples of the world in seeking economic justice and calling for the direct and mandated reduction of global carbon emissions of developed countries, such as the USA, the European Union, and Japan by 80% to 95% of the 1990 levels, much sooner than 2050.

2.We demand that these developed countries, which are historically responsible and accountable for massive GHG emissions, be made to primarily finance appropriate adaptation efforts of developing countries, as well as the transfer of appropriate mitigation technologies.

3.We call for an efficient, equitable and transparent global funding mechanism to ensure the judicious use of resources for peoples' adaptation to climate change impacts and the installation of effective mitigation measures. This fund should be managed by the Conference of Parties of the United Nations Framework Convention on Climate Change, not by financial institutions, such as the World Bank, which have a track record of financing projects and programs that only push developing countries deeper into debt while ensuring the profitability of extractive and fuel-based industries.

4.We strongly criticize the use of market-based solutions such as carbon trading and CDM as these are not effective in reducing GHG emissions. Private corporations and TNCs have manipulated such mechanisms for them to continue emitting GHGs in the environment

5.At the national level, we propose an overhaul of the energy plan and program of the Philippine government, which promote the dependence of the country on fossil fuels and technologies that are dependent on such fuels. A new and strategic energy plan should be formulated that genuinely promotes and harnesses locally-based clean energy resources and will lead to energy independence and self sufficiency. At the same time we demand a moratorium on the construction and operation of new coal plants.

6. We call for a massive education and public information campaign on climate change and global warming to ensure public awareness of the issue and identify adaptation measures as well as to promote sustainable and responsible consumption as an alternative to the current culture of consumerism.

7.We demand that government prioritize climate change adaptation measures to prepare local communities for the possible impacts of climate change, particularly by a.) conducting and make publicly accessible nationwide geo-hazard studies of the current Philippine chemico-physical situation, environmental conditions b.) constructing appropriate infrastructures, such as landslide or flood control and riverbank stabilization systems, especially in disaster-prone areas, and c.) promoting risk reduction and disaster preparedness among the population.

8.We demand that the government immediately implement total commercial log ban and mining moratorium, and launch massive forest, coastal and marine rehabilitation and protection programs.

9.We call on the rejection of government policies and international agreements that only serve to hasten the depletion of our natural resources, destruction of the environment and contribute further to the impacts of global warming.

10.We call on the Philippine government, the academe, professional scientific organizations, and concerned scientists to promote and conduct researches on climate change, most especially on local climate forecasts, renewable energy development, impacts, and most appropriate adaptation and mitigation measures. The results of such efforts should be disseminated to all concerned agencies, organizations and sectors through the mass media, educational institutions and various public fora.

Signed on 19 November 2008

Center for Environmental Concerns-Philippines

The Center for Environmental Concerns – Philippines (CEC-Phils) is a non-government organization founded in 1989 through the initiatives of organizations representing fisherfolk, farmers, indigenous peoples, women, urban poor, and professional sectors. Currently, the Center is a service institution based in Quezon City, Metro Manila. Its area of operation and networking covers the entire Philippines and different ecological contexts.

At CEC-Phils, we work to cultivate environmental awareness and action, create a community of advocates, and contribute to the defense of ecosystems and peoples through empowering education, community- based research, and people-oriented, patriotic, and scientific advocacy.

Our current programs span the range of disciplines and concerns: research and scientific study, environmental education, training and community services, advocacy and campaigns, networking and linkages.

At the grassroots level, CEC-Philippines closely works with communities and organizations nationwide, supporting their initiatives to nurture their ecosystems, defend their common access to natural resources, and eventually improve their living and working conditions in the context of a balanced and healthy environment.

At the national level, CEC-Philippines advocates for people-oriented, patriotic, sustainable, and scientific policies and programs for the protection of the Philippine environment.

At the global level, CEC-Philippines engages in information sharing, international networking, cross-cultural exchanges, and solidarity initiatives on common environmental issues and concerns.

Contact Us

Mailing address: P.O. Box 1212-1152 Central Post Office Quezon City
Telefax: (63-2)920.9099
Website: www.cecphils.org
Email: info@cecphils.org

Philippine Climate Watch Alliance

PCWA is a broad network of non-government organizations, grassroots and people's organizations, and individuals aiming to examine and address the impacts of climate change on marginalized communities within the country.

Members are: Alliance for Genuine Development-Mindanao, Inc.▪ Organization of Advocates of Science and Technology of the Philippines (AGHAM) ▪ Agham-Youth ▪ Philippine National Federation of Peasant Women ▪ Bagong Alyansang Makabayan ▪ Bayan Muna Party List ▪ Center for Environmental Concerns Philippines, Inc. ▪ Concerned Citizens against Pollution ▪ Council for People's Development and Governance ▪ Computer Professionals Union ▪ Ecumenical Institute for Labor Education and Research ▪ Central Visayas Fisherfolk Development Center-FIDEC ▪ GRAIN-Philippines ▪ Ibon Foundation ▪ Kalipunan ng mga Damayang Mahihirap ▪ Kalikasan People's Network for the Environment ▪ Kahugpongan sa Lumad sa Halayong Habagatang Mindanao ▪ Federation of Indigenous Peoples of the Philippines ▪ Central Visayas People's Network for Life and Environment Inc. ▪ Kilusang Magbubukid ng Pilipinas ▪ Kilusang Mayo Uno ▪ Madia-as Ecological Movement ▪ Magsasaka at Siyentipiko para sa Pag-unlad ng Agrikultura ▪ National Council of Churches of the Philippines ▪ National Strength of Fisherfolk Movement of the Philippines ▪ PANALIPDAN-Southern Mindanao Region ▪ Panalipdan-Youth ▪ Rural Missionaries of the Philippines ▪ Rural Missionaries of the Philippines-Northern Mindanao Region ▪ Alliance for Children's Concerns ▪ Sibol ng Agham at Teknolohiya para sa Bayan ▪ SOCSKSARGENDS-Agenda ▪ Sun of Justice and Peace (Sol Justitiae et Pax) ▪ Ugnayan ng mga Mamamayan Laban sa Pagmimina at Kumbersyong Agraryo sa Bikol

Contact the PCWA National Secretariat

Address: #26 Matulungin St. Central District, Diliman, Quezon City
Telephone: +63 2 9248756 \
Email: pcwa.secretariat@gmail.com
Web: www.philclimatewatch.org

April 18, 2009
Press Release

Address global warming now, environmental activists call on

Environmental activists from Manila, Central Luzon and Southern Tagalog raise different environmental issues that further degrade the Philippine environment and make us more vulnerable to the impacts of climate change, in a press conference held today in Quezon City.

"With the coming celebration of Earth Day 2009, we are still the hottest of ecological hotspots. The Philippines remains one of the countries which have the most devastated environment. Still, we have one of the fastest biodiversity loss in the world that remains unchecked," remarks Clemente Bautista, national coordinator of Kalikasan PNE.

To qualify as an ecological hotspot, a region must meet two strict criteria: it must contain at least 1,500 species of vascular plants as endemics, and it has to have lost at least 70 percent of its original habitat. More than 50% of our biodiversity is endemic to the country and the country has lost more than 93% of its original habitat.

"We are becoming more vulnerable to the effects and impacts of climate change and global warming not only because of the sorry state of our environment but also because the Arroyo government continue to implement policies and projects which are detrimental to our people and mother earth," explains Mr. Bautista.

Based on historical records, legal commercial logging done by foreign and local companies primarily caused the deforestation in the country. While commercial mining projects of the government are one of the major threats in environmentally critical areas such as watersheds and forests. Deforestation results to release of methane gas in the atmosphere and reduces the capacity of the forest to store carbon.

"Aside from large-scale mining and logging, landfills, coal and nuclear power plants are becoming the priority projects of the Arroyo government, which arees threats to biodiversity conservation and are contributing to climate change as well," says Mr. Bautista.

"The San Mateo and Bulacan Landfill projects are two such cases. The government allowed these projects even if these are located in forest and watershed areas. Based on our particular study in San Mateo landfill project in Rizal, not only is it located inside a forest area but is also technically flawed and lacks proper management. This will definitely emit combustible and toxic gases which will pollute the atmosphere and contribute to global warming," explained Engr. Darrow Lucenario, an environmental and sanitary engineer.

Biogas is the gas produced when organic waste breaks down in the landfill without oxygen. It is made up of about 50% carbon dioxide and 50% methane, two of the most concentrated green house gases in the atmosphere.

Meanwhile, Ricarido Saturay Jr. of scientist group AGHAM and convenor of Philippine Climate Watch Alliance (PCWA) exposed the Arroyo government's false claims that the Bataan Nuclear Power Plant (BNPP) offers a significant contribution in addressing climate change. "A nuclear power plant employs energy-intensive and fossil-dependent industries such as uranium mining, construction and decommissioning of nuke facilities, processing, transport and storage of radioactive wastes, all of which involves significant carbon emission. This is double jeopardy. While the government allows projects that continue to destroy and pollute our environment, it is also offering false solutions that will even increase our vulnerabilities to climate change," said Mr. Saturay.

The press conference was done in preparation to the series of activities for the coming Earth day celebrations next week which includes the 1st National Grassroots Conference on Climate Change on April 20-21 and the big mobilization rally in the DENR and House of Representatives on April 22.###

April 20, 2009
Press Release

Grassroots conference chides 'Climate Czar' Arroyo for failing to address global warming

The 1st National Grassroots Conference on Climate Change kicked off today just in time before the celebrated Earth Day ensues within two days. Indigenous peoples, peasants, fisherfolks, urban poor, workers, scientists and environmental advocates from all over the country participated in the conference held at the University of the Philippines in Diliman, Quezon City. The two-day conference gathers more than 120 representatives from rural and urban communities and is set to tackle the issue of global warming and its impacts to the country.

"We are the most threatened and affected by climate change and yet we are the least informed. Climate change impacts such as flashfloods and landslides continue to ravage our communities and farmlands. This gathering is a step forward for grassroots communities to come up with collective and lasting solutions in addressing the impacts of climate change," says Reylan Vergara of Madiaas Ecological Movement based in Iloilo province.

The conference with its theme: "***Confronting Climate Change: Unity of Grassroots Organizations and Advocates for Action and Solidarity***" was organized by the Philippine Climate Watch Alliance (PCWA), a broad muliti-sectoral alliance which aims to address the impacts of global warming. The main objective of the conference is to educate the basic sectors on the issue of climate change and come up with recommendations and plan of actions on how to mitigate and adapt to the effects of global warming at the community level.

"We believe that in order to effectively address climate change in the Philippines, the grassroots should be united, well-informed and prepared, ready to be mobilized in their millions in demanding to stop destructive projects and policies set by the government, and push for policies that genuinely address concerns and issues at the local level. Sadly, President Arroyo — who had proclaimed herself as the climate change czar, fails to do this up to now," says Ricarido Saturay, convenor of PCWA.

"Her recent announcement to make the Philippines as a 'carbon-neutral society' through her climate honcho Heherson Alvarez is pure non-sense. How can the country be carbon-neutral if the government continues to allow the construction of coal power plants, large-scale commercial logging and mining?" Mr. Saturay explains.

The Philippines is identified as one of countries in the world most vulnerable to the ill-effects of global warming. Super typhoons, long droughts, rising tides, and coastal flooding are some of the expected impacts of climate change to the country. Yet, based on record no law in the country has been passed to comprehensively address the issue of climate change and global warming.

"Environmental disasters such as flashfloods and landslides are not only results of a changing climate but more directly so by destructive projects and operations of transnational corporations in our communities such as large dams, commercial mining, logging and huge mono-crop agricultural plantations. The degradation and pollution brought about by these projects make us more vulnerable to climate change and global warming. If the government cannot protect us from ecological disaster, then our only hope is through collective action and solidarity in addressing and surviving the global threat of climate change in our own means and our own strength," remarks by Datu Monico Cayug, an indigenous leader from Kalumaran, an inter-regional alliance of Lumads in Mindanao.

Legislators such as Senator Jamby Madrigal, chairman of the Senate Committee on Natural Resources and Environment, MAKABAYAN Senatorial candidate Congressman Satur Ocampo have also attended the conference. According to Senator Madrigal, " Whatever president Arroyo does and says she does to help the Filipino people mitigate and adapt to the effects of climate change is meaningless and futile unless there is a reversal of the environmentally destructive policies of the government which directly causes climate change such as the Mining Act of 1995. You can't talk of addressing climate change and continue these projects and programs." The two legislators have committed to take climate change and global warming as one of their major concerns in their respective legislative bodies. ###

Press Release
21 April 2009

Fisherfolks and Climate Activists To Demand More Actions Against Climate Change

UP Dilliman, Quezon City - A few days after the Supreme Court concluded their forum on environmental justice, fisherfolks from all over the Philippines who attended the 1st National Grassroots Conference on Climate Change organized by Philippine Climate Watch Alliance (PCWA) are worried about the accelerating impacts of warming planet.

Vince Cinches the Executive Director of Central Visayas Fisherfolk Development Inc. (FIDEC INC.) one of the many convenors of Philippine Climate Watch alliance in their paper presented during one of the workshops in the conference on the impacts of climate change to coastal communities, fisheries and fisherfolks, said that "Climate Change becomes an additional and more sustained burden of poor fisherfolks nationwide. Even before we felt the impacts of climate change, we have been marginalized by off-shore mining, commercial fishing, privatization of sea waters, reclamation projects, and fishery laws among others. We should remember that such projects are carbon intensive that contributes to increase in global warming gasses"

"Climate change has further marginalized the poor coastal people, through massive decline of fish catch, rising cost of fishing, and collapse of ecosystem among others, being poor diminishes capacity to respond to the impacts of climate change, the change in climate is accelerating, the community cannot keep up with the pace."

"What is alarming on the other hand is that the warming planet has opened up new fronts of vulnerability in the community, we have stronger and frequent storm surges, seas are inundating our homes because of rising sea level, breeding grounds of marine species are collapsing because of acidity and warm waters. We no longer have potable waters to drink because of salt water intrusion."

Fernando Hicap, the National Chairperson of the activist fishers group PAMALAKAYA said"Governments and their cohorts in big monopoly businesses are the main culprits why the planet is ailing and we the poor are paying dearly since we don't have the capacity to adopt and respond to climate change. The poor should rely on each other to rescind anti-people and anti-environment policies."

"This grassroots meeting is an important venue for us not just to strongly register the position of community people in the current discourse regarding global warming but to consolidate our ranks and turned it into a decisive force in making culprits accountable while dramatically reducing our carbon footprint"

Mr. Vince Cinches, executive director of FIDEC and convenor of PCWA said that the conference is not just first in the country but in the whole Southeast Asia as well.

He added that the conference is an important contribution of the Filipinos in the ongoing global initiatives against climate change especially that the Kyoto Protocol will soon end and will undergo renegotiation. "We wanted to ensure that the provisions of international policies regarding climate change should have more teeth against polluters, have more binding policies and responsive to the needs of the poor people around the world."
On April 22, Earth Day, the group will hold a protest action to demand accountability from government and corporations and to demand real actions against the specter of climate change. ###

Press Release
21 April 2009

Conference finds Arroyo's policies not addressing, but worsening the impacts of Climate Change

The 1st National Grassroots Conference on Climate Change started day one of its two-day conference with information-rich discussions designed for grassroots participants and delivered admirably by able resource speakers.

The good news is that every Filipino must plant 100 trees per year to sequester the carbon emission of the country, which is attainable. The bad news however is that even if the Philippines stops emitting carbon dioxide there will be little impact on global warming as the country's contribution to global carbon emissions is way too low to be significant. This is according to environmental expert Dr. Tess Perez of the Ateneo de Manila University, who delivered her presentation in the conference yesterday.

Based on government study, the Philippines contributed only 0.3% of the total global carbon emission or just 75,998 metric tons in 1999. "But even with little effect on the global scale, we should continue to plant trees as this will locally result to cleaner air and a better environment," adds Dr. Perez. A tropical tree removes 8 kg of CO2 per yr (or 8 tons per hectare).

The conference with its theme "Confronting Climate Change: Unity of Grassroots Organizations and Advocates for Action and Solidarity" was organized by the Philippine Climate Watch Alliance (PCWA), a broad muliti-sectoral alliance aiming to address the impacts of global warming. The objectives of the conference is to educate the basic sectors on the issue of climate change and come up with recommendations and plan of actions on how to mitigate and adapt to the effects of global warming at the community level.

"Our main problem here is that even if the Filipinos continue to plant trees, this will only result to a naught as the government continues to allow and even promote commercial logging and mining which directly destroy our forests and mountains." says Dr. Giovanni Tapang, convenor of PCWA and Chairman of the scientists' group AGHAM.

The conference issued a statement saying that "Philippine government lacks genuine policies and programs to mitigate climate change and help communities adapt to its impacts. The Arroyo administration promotes and pursues globalization-oriented policies in strategic sectors, such as energy, mining, forestry, agriculture, and trade, which render the country more vulnerable to the impacts of climate change."

Dr. Tapang questioned the Arroyo administration's sincerity in addressing climate change and its causes. "How ironic it is that the government has never ceased issuing Timber Licensing Agreements (TLA's) and Industrial Forest Management Agreement (IFMA) to large-scale loggers, and mining permits to foreign corporations, says Dr. Tapang.

In 2005, such Forest Tenurial Agreements issued by the government has covered 3,448,687.93 hectares of forest lands. With mining, there were 294 mining agreements in existence, consisting of 2 Financial and Technical Assistance Agreements (FTAA's), 262 Mineral Production Sharing Agreements (MPSA) and 30 Exploration Permits (EP), covering approximately 600,000 hectares of land as of 2008.

Meanwhile, Datu Monico Cayug, an indigenous leader from Kalumaran, an inter-regional alliance of Lumad in Mindanao frets as the effects of global warming on the communities have been discussed in the conference, some of which are very familiar because they already experience it.

"We are now experiencing the brunt of climate change in our everyday lives. Farming for us has become more difficult as stronger typhoons and longer droughts have destroyed our crops. To make our dire situation worse, many of our people are being displaced as our farmlands and forests are given to transnational corporations for their commercial mining, logging and agrofuel plantations", says Datu Cayug.###

22 April 2009

KALIKASAN People's Network for the Environment

Earth Day protest message: Protect the environment, Address Climate Change

Several hundreds of environmental activists, Church people, indigenous peoples, peasants, fisherfolks, and scientists from Metro Manila, Southern Tagalog and Central Luzon commemorate Earth Day 2009 by having a People's Parade and Caravan for the Environment that started from the Department of Environment and Natural Resources (DENR) and ended in front of the House of Representatives (HOR) in Quezon City.

The said Earth Day activity paraded colourful and creative floats symbolizing emerging and important environmental issues such as the climate change, Bataan Nuclear Power Plant, large-scale mining, commercial logging, large dams and garbage landfills. A giant effigy of Mother Earth burdened and devastated by nuclear plants, coal power plants, denuded forests, chainsaw and mine tractors serve as the central float of the parade.

"This symbolizes how the Philippine environment is experiencing massive plunder, degradation and pollution brought about by the policies and projects of the government that allows unsustainable and commercial extraction of our natural resources by private and foreign corporations," says Clemente Bautista Jr. of environmental activist group Kalikasan PNE.

"The devastation of our forests, mountains, rivers and seas has led to an environmental crisis that further impoverishes and threatens the survival of the people. Yet, given the country's dismal environmental situation, the Arroyo government remains defiant to reverse its policies and programs in the extractive industry of mining, logging and energy that are proven detrimental not only to our ecology but also increases the vulnerability of our people in coping with global warming," explained Mr. Bautista.

The Philippines has been called by some environmental experts as a global biodiversity disaster area. This is because of the very fast rate and high biodiversity loss in the country. The country also has been identified as one of the most vulnerable tropical countries to the impacts of climate change.

"Worst in the eve of Earth Day, the Arroyo government and its allies in Congress are brazenly railroading the deliberation of charter change in Congress. They are courting more environmental disasters through Cha-Cha which will allow foreigners to own lands in the country. This will give foreign companies more control to profit from our natural resources and ravage our environment. This we have seen and experienced under the Mining Act of 1995 which gave foreign transnational mining companies to own thousands hectares of our mineral lands," Mr. Bautista remarks.

By the beginning of 21st century, the Philippines has already lost more than 93% of our original forest which has been describe as one of the most rapid and massive in the world. Most of the deforestation sshas been caused by the extensive operations of commercial logging and mining. Forest denudation compounded by the effects of climate change resulted to the worst environmental disasters and tragedies in the Philippines such as the 1991 Ormoc flashflood, 1996 Marcopper mine spill, 2004 Aurora- Quezon landslide and 2005 Lafayette mine spill.

"For the sake of our mother earth and our people, the government should address climate change and not charter change. It must halt and reverse its destructive programs and projects on mining and logging," ends by Mr. Bautista. ###

Acknowledgments

The Philippine Climate Watch Alliance
and the Center for Environmental Concerns-Philippines
would like to thank the following:

Advocates of Science and Technology for the People (Agham)

Computer Professionals' Union (CPU)

CPU Polytechnic University of the Philippines (PUP) interns

CEC volunteer corps

Canadian Catholic Organization for Development & Peace

German Adult Education Association (DVV) International

Kalikasan People's Network for the Environment

Kilusang Magbubukid ng Pilipinas (KMP)

Office of Bayan Muna Representative Satur Ocampo

Office of Senator Ana Maria Consuelo Madrigal

Sinagbayan

Grassroots communities and marginalized sectors from poor countries stand to be the most heavily affected by the various impacts of climate change. This publication documents the proceedings of the first nationwide conference of grassroots communities, people's organizations, and climate justice advocates from all over the Philippines united through the Philippine Climate Watch Alliance (PCWA) to discuss the impacts and implications of global warming on the poor and to make clear the people's calls and responses towards this threat.