

Philippine Climate Change Awareness Raising Initiatives

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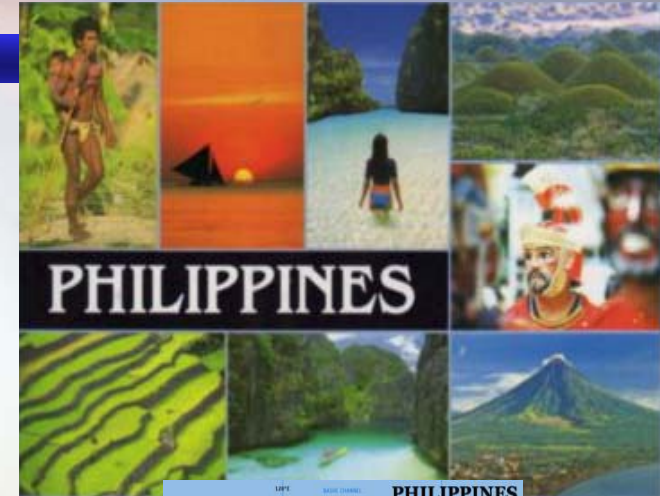
Republic of the Philippines

Department of Environment and Natural Resources

Kagawaran ng Kapaligiran at Likas na Yaman

Quick Facts

- **Area:** 300,000 km²
- **Archipelago:** 7,107 islands
- **Population:** 88.57 M
(Aug 2007)
 - 12th most populous
- **Labor force:** 50% services
(36.2 M, 2007 est) 35% agriculture
15% industry
- **Administrative divisions:**
 - 17 regions, 81 provinces
- **One of the most mega-diverse countries of the world**



Institutional Arrangements

- **Inter-Agency Committee on Climate Change (IACCC)**
 - Created on May 8, 1991 by virtue of Pres. Administrative Order No. 220 to serve as the national coordination mechanism and administrative machinery for the implementation of the Philippines' commitments to the UNFCCC; Co-chaired by the DENR and DOST

- **The Designated National Authority (DNA) for CDM in the Philippines**
 - Pres. Executive Order No. 320 designated the DENR as the DNA for CDM on June 25, 2004

Institutional Arrangements

- **Presidential Task Force on Climate Change**
 - Created on February 20, 2007 by virtue of Pres. Administrative Order 171 to oversee all matters related to climate change. The DENR Secretary as Chair; Chairmanship transferred to the Department of Energy by virtue of Pres. Adm. Order No. 171-A.

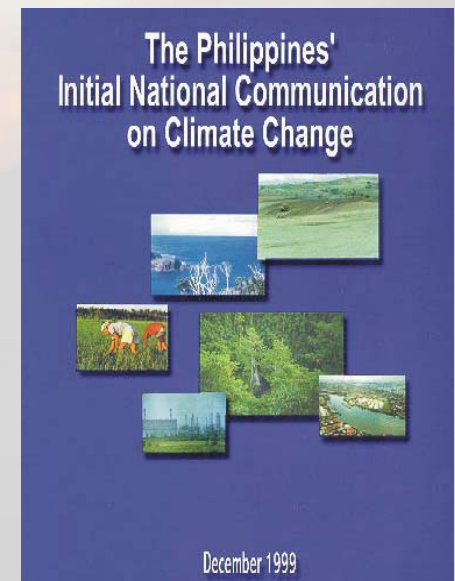
- **Reorganizing the Presidential Task Force on Climate Change**
 - Enacted thru Executive Order no. 774, the President of the Philippines shall serve as Chair.

Public Awareness Initiatives

Preparation of the Philippines' Second National Communication on Climate Change (SNC)

- Through the current project on the Enabling Activity to Prepare the **Second National Communication (SNC) on Climate Change**, it is expected that the gaps and needs identified in the Initial National Communications will be addressed to be able to come up with a more complete and substantive **GHG emissions inventory**.

- It shall also cover the following:
 - Measures to Facilitate Adequate Adaptation to Climate Change
 - Measures to Mitigate Climate Change
 - Transfer of Technology
 - Research and Systematic Observation
 - Information, Education and Training Efforts
 - Other information



Public Awareness Initiatives

Government

Environmental Management Bureau- DENR

- Conduct of roundtable/focused-group discussions and consultations
- Conduct of lectures in academic institutions, symposia, seminars, training-workshops
- Conduct of exhibits and video showing
- Participate in interviews in both TV and radio programs/talk shows
- Feature articles and press releases in national newspapers and magazines

Public Awareness Initiatives

- Development of Information Materials
 - Philippines' Initial National Communication on Climate Change
 - Primer on Climate Change
 - Poster-Calendars
 - Fact Sheets on climate change and the CDM
 - Production of a video documentary on climate change

Climate Change at Ang Pag-Iinit ng Mundo

May mga greenhouse gas (GHG) na bumabalot sa mundo upang mapapanatili ang tamang init na mula sa araw para tayong lahat ay mabuhay at hindi magyelo. Ngunit kapag labis na ang mga GHGs na ito, mas higit na umiinit ang ating planeta at nagdudulot ito ng kakaibang pagbabago sa ating klima o **climate change**.

Ako si Sinag Alitaptap!

Kami ay naninirahan sa mahalaman o mapunong lugar kung saan may malinis na hangin. Dahil sa pagdami ng syudad, pagkaputol ng mga puno at pagtaas ng antas ng polusyon ay bihira na kaming makita ngayon.

Higit pa dito, may epekto din ang mga gawaing ito sa ating klima na maaaring magdulot ng pagbabago sa ating nakasanayang panahon o **Climate Change**.



Mga GHGs at mga pinanggalingan nito:

Carbon Dioxide o **CO2** mula sa usok ng saksakyan at mga industriya. **Methane** na nagmumula sa dumi ng hayop at anumang nabubulok na basura. **Nitrous oxide** na mula sa mga kemikal na pataba o fertilizer sa pananim. **Halocarbons** tulad ng **CFCs**, **HCFCs** na ginagamit sa airconditioner at refrigerator para di magoverheat ang appliance.

Isang makakalikasang mensahe mula sa:



Department of Environment and Natural Resources



United Nations Development Programme

**KALIKASAN AT MAMAMAYAN
ATING YAMAN, ALAGAAN!**

Fan

Ang ilan sa maaring epekto ng pagbabago ng klima o **Climate Change**

- Magdudulot ito ng epekto sa ating kalusugan. Maari din ito maging sanhi ng hika, sakit ng ulo at mga sakit sa balat.



- Dahil din sa labis na antas ng temperatura natutuyo ang mga bukirin at nasisisra ang mga pananim na nagdudulot ng kakapusan ng suplay ng pagkain.



- Kapag lalong umiinit ang mundo maaaring lumalakas ang mga bagyo na magdudulot ng napakalakas na buhos ng ulan at pagbaha.



- Maaari ding mas dumami ang mga sakit na galing sa lamok tulad ng Dengue at Malaria dahil mabubuhay ang mga lamok sa mainit na lugar.

Sa pangkalahatan, ang temperatura ay may kinalaman sa pag-init o paglamig ng ating kapaligiran, pagbago-bago ng panahon, pagbago ng lakas ng dating ng pag-ulan at pagtaas ng tubig sa karagatan. Ang mga ito ay may kinalaman sa pagbabago ng klima o **climate change**

Huwag mabahala,
ito ang mga munting hakbang upang mabawasan ang iyong **GHGs**.



- 1) Bawasan ang paggamit ng sasakyan. Maki carpool, magbisikleta o kaya'y maglakad paminsan-minsan. Mainam ang ehersisyo sa katawan.



- 2) Magtanim ng puno at halaman sa bakuran upang magsilbing tagasipsip ng GHGs.



- 3) Ugaliing magsara ang mga ilaw at hugutin sa saksakan ang mga appliance kapag di ginagamit. Kumukunsumo parin sila ng kuryente.



- 4) Ugaliing mag-recycle at maghiwahiwalay ng basurang nabubulok at di nabubulok. Ang basura ay pinagmumulan ng GHGs.



- 5) Magdala ng sariling bag o lalagyan kapag namimili sa grocery o palengke. Bawasan ang basura dulot ng plastic bag.



- 6) Gumamit ng mga makabagong energy-saving na bumbilya.

Fan

Beat the Heat
Let Us Work Towards a Safer Climate!

WH

Climate change is attributed directly or indirectly to human activities that alter the composition of the global atmosphere, in addition to natural climate variability observed over comparable time periods.

HOW WILL CLIMATE CHANGE AFFECT THE PHILIPPINES?

- Global average surface temperature will rise by 1.8 mm per year over 1961-2000.

- Global average sea level rise will be 1.8 mm per year over 1961-2000.

There are projected to be an increase in the number of tropical cyclones affecting the Philippines.

Sea Level Rise and Coastal Flooding

As the sea level rises, coastal areas will be affected. About 70% of the population lives in coastal areas.

Agriculture

Directly affected by climate change, agriculture is one of the major sectors in the country.

There are projected to be an increase in the number of tropical cyclones affecting the Philippines.

What is climate change?
The intergovernmental panel on climate change (IPCC) defines climate change as a change in climate over time, whether due to natural variability or to human activities.

What are the impacts of climate change?
Climate change is expected to continue to pump more greenhouse gases into the atmosphere. The IPCC Fourth Assessment Report (AR4) states that the whole world will suffer from the effects of climate change.

What are the vulnerable sectors?
Coastal communities and low-lying coastal areas are particularly vulnerable to sea level rise and coastal flooding.

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- The rise in temperature will lead to an increase in the number of heat waves.

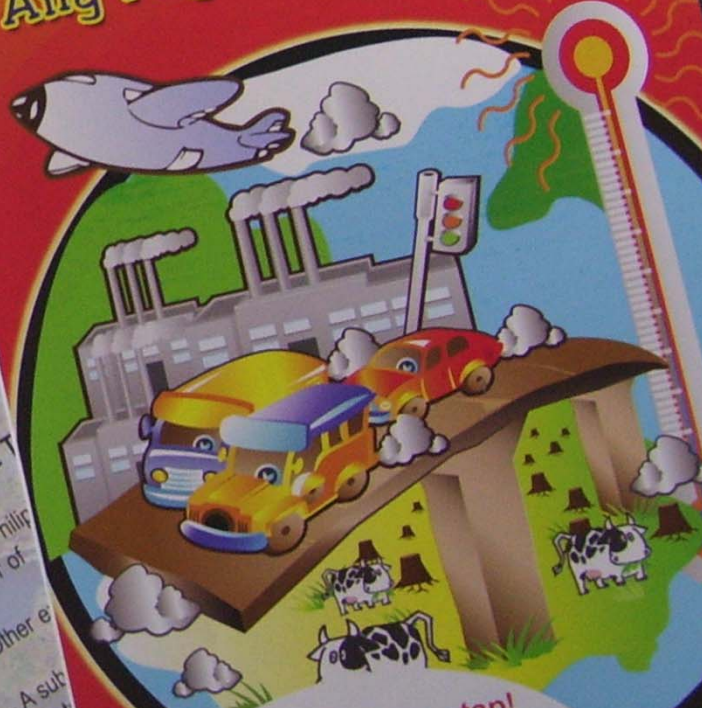
- Human-induced climate change will affect the Philippines.

WHAT ARE THE CAUSES OF CLIMATE CHANGE?

- In the Philippines, the major causes of climate change are:

Other factors include:

Climate Change at Ang Pag-Init ng Mundo



Bakit umiinit ang mundo?

Ano ang silbi ng greenhouse gases?

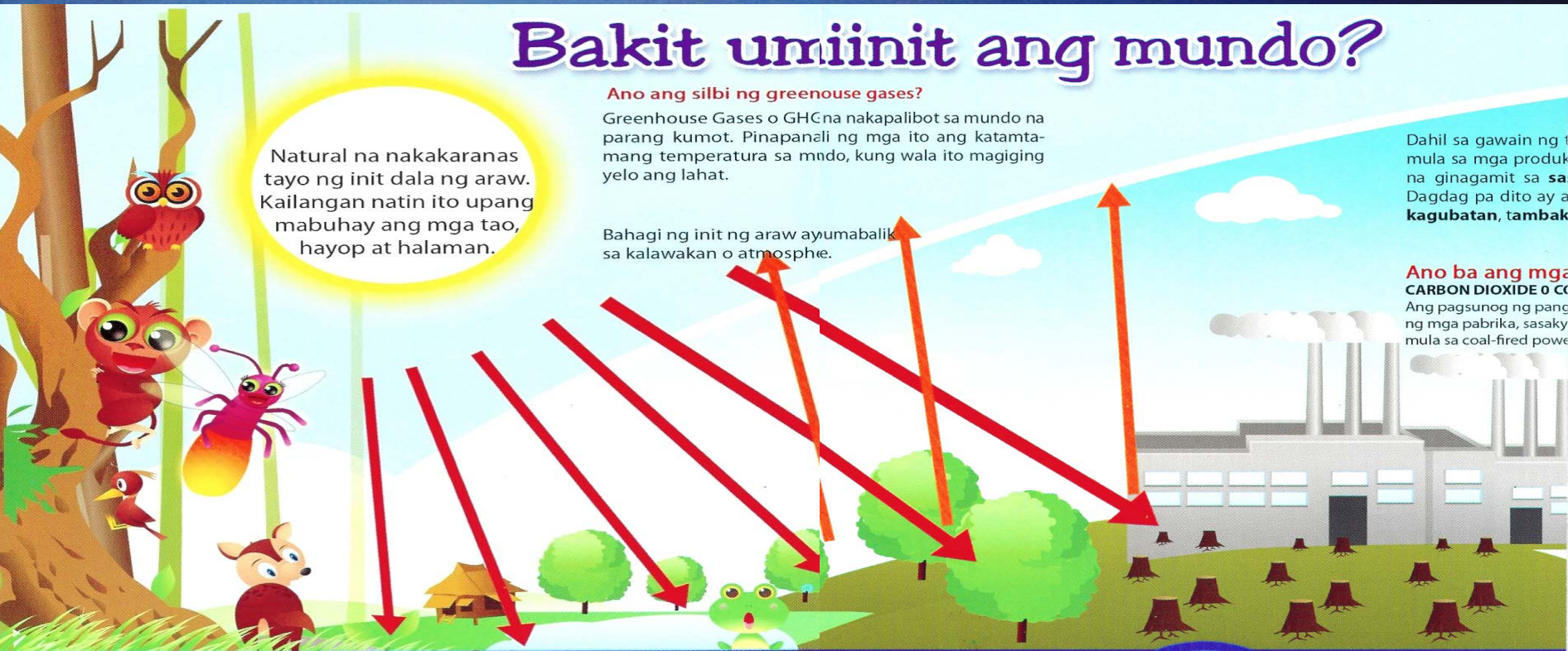
Greenhouse Gases o GHG na nakapalibot sa mundo na parang kumot. Pinapanali ng mga ito ang katamtamang temperatura sa mundo, kung wala ito magiging yelo ang lahat.

Bahagi ng init ng araw ay umabalik sa kalawakan o atmospher.

Natural na nakakaranas tayo ng init dala ng araw. Kailangan natin ito upang mabuhay ang mga tao, hayop at halaman.

Dahil sa gawain ng tula sa mga produk na ginagamit sa sa Dagdag pa dito ay a **kagubatan, tambak**

Ano ba ang mga CARBON DIOXIDE O CO₂
Ang pagsunog ng pang ng mga pabrika, sasaky mula sa coal-fired power



Ang ilan sa maaring epekto ng pagbabago ng klima o **Climate Change**



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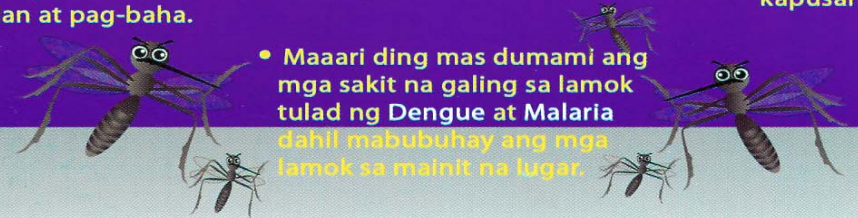


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Brochure

Makialam sa iyong kinabukasan.
Tara na, maki-iba!



Isang makakalikasang mensahe mula sa:

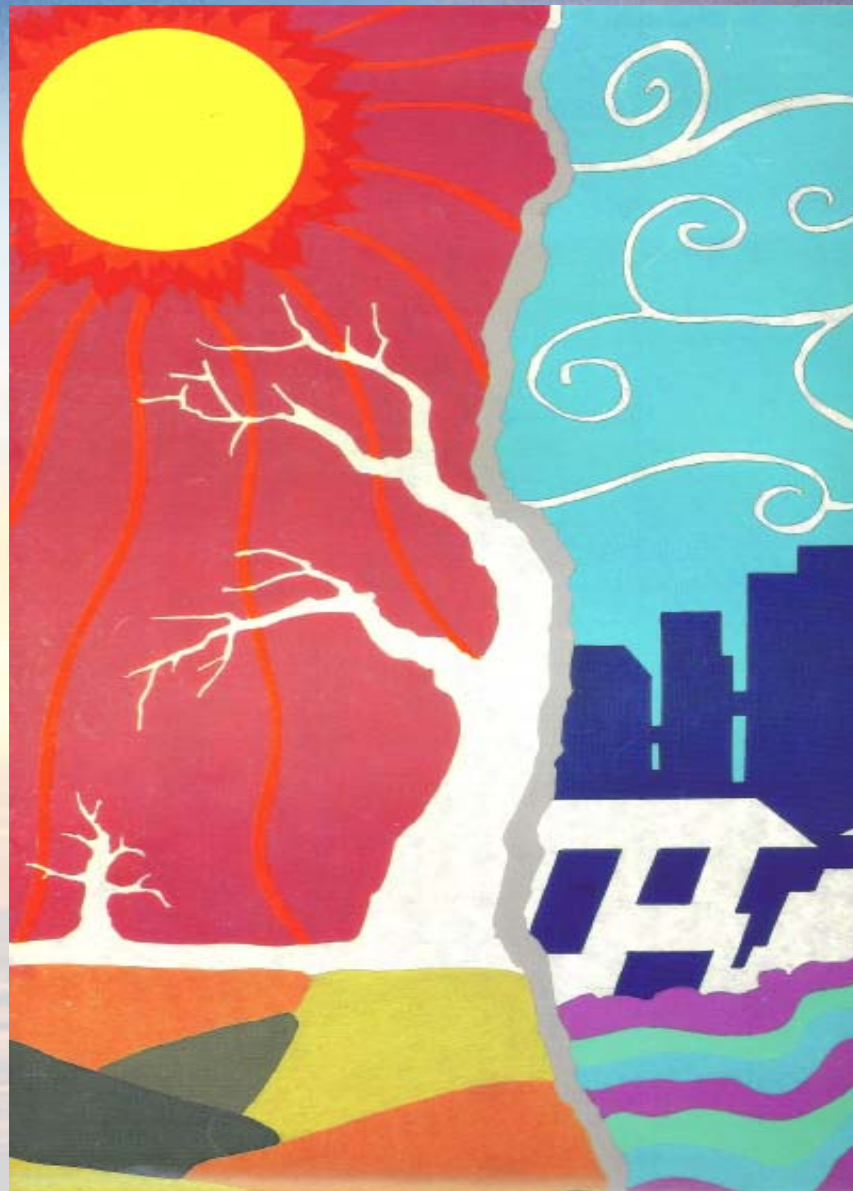


Department of Environment
and Natural Resources



United Nations
Development Programme

**KALIKASAN AT MAMAMAYAN
ATING YAMAN, ALAGAAN!**



**BURNING SUMMERS...
STINGINGLY COLD WINDS..
DEVASTATING DROUGHTS..
CATASTROPHIC TYPHOONS..
FLOODED CITIES...**

These are among the manifestations of climate change phenomenon. These prompt nations of the world to jointly address the matter through the 1992 United Nations Framework Convention on Climate Change.

Conduct of Special Events such as the Battle of the Bands 2008 “It’s Not Cool to be CO2!”



Public Awareness Initiatives

- CDM promotion efforts
 - Development of CDM country guide
 - Published the DNA CDM brochure
 - Printing of CDM Country Fact Sheet
 - Conduct of Investment Road Show
 - Establishing linkages with relevant government institutions and private/business sector agencies

Public Awareness Initiatives

- IEC on CDM for stakeholders
 - Establishment of a CDM clearinghouse
 - www.cdmdna.emb.gov.ph
 - Development of a manual on GHG Emission Reduction Monitoring and Reporting Guideline
 - Development of a manual on the Emission Reduction Purchase Agreements (ERPA): A Seller's Perspective
 - Printing of a one-pager CDM Basics
 - Continuing efforts on promotion and capacity building on CDM through lectures, seminars and training-workshops

Public Awareness Initiatives

Department of Agriculture

Climate change adaptation and mitigation are promoted along with the advancement of agricultural technology.

Public Awareness Initiatives

Department of Energy

- Earth Hour Manila 2008 and 2009 (in collaboration with WWF)
- Ceremonial launching of SWITCH, a program encouraging the shift to efficient lights, alternative fuels, and renewable energy
- Publications on energy conservation

Public Awareness Initiatives

Philippine Atmospheric, Geophysical and Astronomical Services Administration

- Conduct of climate change forums
- Publication of brochures, posters, briefing papers and the Weather Situation Outlook and Seasonal Climate Outlook

Public Awareness Initiatives

Local Government

Province of Albay

- ***National Conference on Climate Change Adaptation*** The conference brought together high level government officials led by the President herself, academics, researchers, NGOs, the business sector, local community representatives, and the donor community. Among the topics discussed were the current situation in climate disaster prone areas in the country, the needs of the local communities, infrastructure modifications, and what strategies we can do to adapt to a changing climate.
- A key output of the conference was the “***Albay Declaration on Climate Change Adaptation***” mainstreaming climate change into local and national development policies.

Public Awareness Initiatives

Senate

Senator Loren Legarda produced "Rains in Summer: A Documentary Drama on climate Change".

It tackles the social, economic, and health impacts of climate change.

Public Awareness Initiatives

Non-Government Organizations

Philippine Network on Climate Change

- Alliance of NGOs
- Member of Inter-Agency Committee on Climate Change
- Involved in the advocacy of climate change and sustainable development
- Produced brochures and primers and conducts seminars for various audiences

Public Awareness Initiatives

Media

GMA News and Public Affairs

Produced a television documentary, *Signos: Banta ng Nagbabagong Klima (Fatal Signs)*.

The documentary investigates local manifestations of climate change in the Philippines.

High public demand prompted the network to air the documentary again on television.

Public Awareness Initiatives

Media

News and Feature Articles

Economy to feel impact of recent calamity—experts

THE Philippine economic growth target may be cut this year because of the impact of tropical storm Ondoy and may dampen the Christmas season, experts said Tuesday.

Augusto Santos said the economy, as measured by gross domestic product (GDP), may be reduced to between 0.7 percent and 1.7 percent this year. He is the acting Socioeconomic Planning secretary and director general of the National Economic and Development Authority (NEDA).

GDP, a key economic indicator, is the total value of all final goods and services produced in a country in a year.

The government targets a GDP growth ranging from 0.8 percent to 1.8 percent this year. The economy in the first half grew by only 1 percent, lower than the 4-percent growth in the same period last year.

Using the latest available figures from the National Disaster Coordinating Council and the NEDA Regional Offices

and Office of Civil Defense on the impact of damages caused by... [tropical storm] Ondoy, our preliminary estimate shows that the recent storm could reduce the real GDP growth rate in full year 2009 by at least 0.043 percentage points," Santos said.

He added that Ondoy (international name: *Ketsana*) damaged P108.5-million worth of infrastructure and crops and affected about 90,000 families as it brought a 40-year record-breaking 41.6-centimeters total rainfall in a single day (the previous record was 33.4 centimeters in July 1967).

But Dennis Arroyo, director of NEDA's national planning and policy staff, said that overseas Filipino workers' inflows have been stronger than expected.

"The government forecast is flat growth, or 0-percent growth from 2009. In actual fact, growth is 3.8 percent so far, or from January to July 2009," he added. "We are maintaining the 0.8 [percent] to 1.8 percent forecast for 2009."

Budget vs. climate change

Also on Tuesday, a civil society group urged Congress to allocate P11.4 billion additional funding in the 2010 national budget to address disasters that may be wrought by weather conditions caused by climate change such as tropical storm Ondoy.

Former national treasurer Leonor conover of Social Watch Philippines said that "the Philippines is naturally pro change and the safety of many people marized in three words: 'Climate Change'."

The Alternative Budget Initiative consortium of 60 nongovernment organizations by the SWP, has been calling for it for climate change adaptation and measures since 2006.

"The wrath of Ondoy should serve up call for government to be climate sensitive and to finally adopt the budget change mitigation and adaptation of the ABI's environment group," Brico ABI proposed that the government total of P11.4 billion in certain items in it in order to become "climate change sensitive."

Among the suggested items to be using the suggested amount include: for the finalization of the Philippine change action framework and plan; climate change initiatives in the top provinces; harmonization of existing to a national climate change action and plan; climate change actions in agriculture sector; orientation of Environment Department's programs, operations toward climate change actions; an programs responding to climate-related disasters.

DARWIN G. AMOJELAR, CHINO ARNOLD O. DE VERA AND FRANK LLO

Climate change 'di na biro

Hindi na biro ang climate change kaya dapat nang magtulungan ang lahat ng mamamayan para pangalagaan ang kapaligiran.

Itong ang panawagan ng mga kongresista na ay nang manisi ngayon kung sino ang nagkulang sa ahensya ng gobyerno kaya naranasan ng Metro Manila ang tinaguriang "great flood."

Ayon kay Gabriela party-list Rep. Luzviminda Ilagan dapat aniyang magising na ang lahat, hindi laman ng gobyerno kundi lahat ng tao, sa perhuwisyong idinagdag ng bagyong si Ondoy.

"Mukhang grabe na ang climate change at hindi ma-predict ang lakas ng bagyo," pahayag ni Ilagan.

"Mukhang matindi na rin ang pagkasira ng kabanakal kaya 'yung konting ulan sa bukid, malaki ang epekto sa patag," pahayag ng mambabatas.

Maliban dito, posible aniyang barado na ang lahat ng kanal sa Metro Manila kaya madaling umapaw ang tubig at mabagal ang pagbababa nito. "Maaaring sobra na ang tubig sa mga daanan ng tubig kaya mabilis ang pagpapalig ng mga ilog," ayon pa sa mambabatas.

Dahil dito, umapela ang mambabatas sa mga itinatapon ang sarili sa pagtatapon ng basura lalo na sa Metro Manila kung saan kaliwa't kanan ay may mga makikitang mga dumi na itinatapon ng mga itinatapon ng basura.

Nais naman ni Kabataan party-list Rep. Ray Palatino na ituro na sa mga eskuwelahan ang itinatapon ng basura.

"Puwedeng simulan sa elementary schools ang itinatapon ng basura, na huwag magtapon ng basura sa mga daanan, na kapag may basurang makita, damputin at ilalagay sa mga itinatapon ng basura," ani Palatino. (Bernard Taguino)

Bringing home the lesson of global warming

AT LARGE

Rina Jimenez-David



dry. With envy, I recall news stories about families living in Sampaloc who've been so injured to periodic floods that they've set up pulley systems so that the minute floodwater poured into their homes, they could raise their major appliances and furniture without too much effort.

I tell you, I'll never take for granted living in a safe and dry home ever again.

With some sympathy, I recall the many news reports about urban poor families forced to evacuate their shanties after these flimsy shelters had been immersed in water. We may not be forced into such desperate straits—yet—but I've just made a mental note never to look scornfully on such hurried evacuations again.

Now I know how it feels to be forced out of your comfort zone, suddenly wading into murky water inside your own home, facing a night spent in cramped quarters.

Elsewhere in the village, my brother-in-law and next-door neighbor reports, some residents aren't even able to get to their homes, and so have elected to wait out the floods in nearby fast-food places and supermarkets.

"It's the environment," my husband muttered as we surveyed with dismay our flooded dining room.

Indeed, how could it happen that even here, a relatively elevated portion of the metropolis, we have had to deal with floods in our living room, dining room and in our bedrooms? It has taken 30 years, but the horrors that drove us out of Mandaluyong have now come a-visitng.

Everyone talks of global warming and the far-reaching consequences of rising ocean levels and

melting polar ice caps. I remember former Environment Secretary Bebet Gozon presenting a computer mock-up of what would happen to Metro Manila should the trend of rising sea levels continue. I didn't even care to look at the Marcos Highway area, even as Navotas, Malabon and Calococ were shown nearly underwater. We were beyond (or above) the danger level—I thought.

Come to think of it, the floods in our neighborhood may not be such a consequence of rising sea levels as I suspected, clogged street drains and dumping in the nearby creek. Still, it is a portent of things to come. Global warming brought home, literally.

I dread the scenario in the next 30 years. For sure, the next prolonged rains will have us scrambling to bring our appliances and furniture out of the water's reach. Maybe we'll evolve coping mechanisms like those hardened families in Sampaloc with their pulley systems. Or we'll move for good to Tagaytay, for as we used to say with some humor, when floods threaten even that house, then that means the rest of Luzon must be underwater.

I NO longer feel much like making jokes like this. It surely is no laughing matter. And the truly funny thing is that despite our current inconvenience, we have only begun to feel a fleeting manifestation of the widespread dangers of global warming.

I'm sure residents of Kiribati and the Maldives, island-nations whose very existence are threatened by the ever-rising ocean levels, would think our anxieties of not much import or gravity. But maybe it does take floodwaters in our homes to bring home the point of global warming. That it's not only island-nations or coastal communities under threat, but even urban middle-class families, comfortable in the stability of their homes of poured concrete and strong roofs, in their villages of paved streets and drainage systems, shaken out of complacency by the reality of our continued neglect of the environment, our careless disregard for the state of the planet we call home.

Public Awareness Initiatives

Industry

Philippine Chamber of Commerce and Industry

- Called on its members to participate in the Earth Hour 2009
- Its environmental advocacy website features “ways to beat the heat”

League of Corporate Foundation

- Prepared a beginner’s guide to tree planting for its members

Philippine Business for Environment

- Initiated climate change advocacy activities such as the multi-sectoral Philippine (Climate) Imperative, the Sustainable Production and Sustainable Consumption through Green Procurement
- Promotes eco-products and sits as a member of the National Ecolabeling Board.

Public Awareness Initiatives

Research Institutions

Klima Climate Change Center

- Established in 1999 as a joint venture of the Inter-Agency Committee on Climate Change (IACCC), the Department of Environment and Natural Resources (DENR) and the Department of Energy (DOE) under the Philippine Climate Change Mitigation Program with funding assistance from the United States Agency for International Development (USAID).

Public Awareness Initiatives

Klima Climate Change Center

- Undertook a major campaign called “Be on a Low Carbon Diet”, which taught its target audience the importance of reducing GHG emissions and adopt an alternative lifestyle.
- Talks/presentations at events
- Media briefings

Public Awareness Initiatives

Pulse Asia Inc.

- ❑ An enterprise launched by professional academics with acknowledged expertise in their respective fields of study.
- ❑ Dedicated to monitoring salient socio-economic, political and cultural issues in the minds of the Filipino public.

Public Awareness Initiatives

Results of Survey

- About four in ten Filipinos claim to have either sufficient (42%) or little (39%) knowledge about climate change
- A small majority of Filipinos (58%) believes there has been a big change in the climate in their place over the past three years; nearly the same percentages consider climate change to be dangerous for the environment (61%) and their families and themselves (62%)
- Around one in two Filipinos (54%) attributes the recent calamities in the Philippines and other parts of the world to humankind's destructive ways



THANK YOU!