### CITY OVERVIEW

Sorsogon City lies at the southernmost tip of Luzon, the largest of the 7,100 islands of the Philippine archipelago and is nestled between the Pacific Ocean and the South China Sea. Of its 64 barangays (lowest level of government) covering 31,292 hectares, 37 lie along the seacoast.

### CLIMATE CHANGE RISKS AND VULNERABILITY

Sorsogon is the capital city of Sorsogon Province which is considered a high risk province in relation to combined climate related risks and volcanic eruptions. The city is particularly at high risk to tropical cyclones and storm surges, extreme rainfall/flooding, increased precipitation, temperature variability and sea level rise.

Nine urban coastal barangays are very vulnerable to climate-induced hazards, given their location, aging and previously damaged seawalls and inadequate drainage facilities, while twenty four barangays along the coast/ rivers with a population of 55,452 (36.6%) risk flooding. Prevalence of red tide (poisonous algae) in Sorsogon Bay is caused by climate related changes. Adverse climate would also impact on the income of more than 50 beach resorts as well as small traders and micro-entrepreneurs linked to tourism.

The disastrous combination of a city lacking the proper Disaster Risk Reduction equipment, tools and facilities and a general public that has limited knowledge on Climate Change related hazards and risks and leaves the poor (43% of city population), who mostly populate high-risk areas and are inadequately covered by social protection schemes, particularly vulnerable.

## PREPARING FOR CLIMATE CHANGE

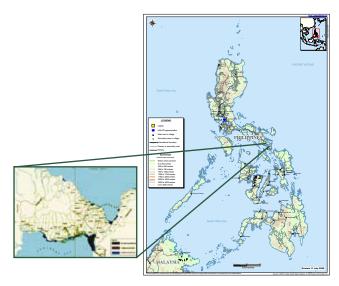
Responding to the call for action, the city established a core team and technical working group for Climate Change. An intensive participatory assessment of the city's vulnerability to climate change has been completed and will be used to update the existing City Land Use Plan as well as feeding into policy discussions at all levels. In May 2009, the city conducted multi-sector city consultations which defined critical actions to increase people's resilience to climate change impacts. Additionally, the city's Disaster Coordinating Council is now being sensitized with climate change preparedness issues as an entry point to mainstream climate risk reduction in to the city governance processes.

## KEY ACTIVITIES PLANNED

- 1. Demonstrate innovative and appropriate technologies on building climate change resilient human settlements;
- 2. Develop capacities of the city government to respond to climatic-induced hazards;



**Population:** 151,454 (2007) Growth Rate: 1.78% **Economy:** Agriculture, Fishing, Trade, and Services **Political/administrative Structure:** Decentralized **Role in the Province:** Administrative, Commercial and Educational Center



UN High Commissioner for Refugees, Philippines Atlas Map, 11 July 2005, available at: http://www.unhcr.org/refworld/docid/4639e6b32. html [accessed 2 October 2009]

# **Climate indicators**

**Rainfall:**Annual rainfall ranges from 2,800 mm to 3,500 mm. Rain is expected 200 days in a year.

Mean annual temperature: 27°C

**Seasons:** Wet and dry. No pronounced dry season but very pronounced maximum rain period from November to January.

**Number of typhoons:** 19 typhoons every year with 2 super typhoons in 2006



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- 3. Implement mitigation measures through efficient energy use, mangrove reforestation and solid waste management;
- 4. Develop knowledge products that will share insights from national and city assessments and advocate for actions in policy reform, planning and implementation of city responses, and community-based initiatives;
- 5. Build partnerships among stakeholders to converge efforts in planning and implementing climate change mitigation and adaptation measures
- 6. Build and advocate awareness on Climate Change among the general public and stakeholders through the media and community activities;

### THE NATIONAL CONTEXT: PHILIPPINES

The Philippine archipelago is a climate hotspot with 88% of its coastal areas facing oceanic waters. Around 19-22 cyclones strike the Philippines yearly. Across the country, sea level has risen by 15 cm. A 1 meter sea level rise would result in about 700 million square meters of land in 64 out of 81 provinces becoming inundated, displacing at least 1.5 million Filipinos.

The government has passed various national policies on climate change adaptation and mitigation and established support structures for policy implementation, such as, (1) National Disaster Coordinating Council, (2) Inter-Agency Committee on Climate Change, (3) Philippine Council for Sustainable Development, (4) Designated National Authority for Clean Development Mechanisms, (5) Presidential Task Force on Climate Change, and (6) Inter-Agency Advisory Board on Climate Change Monitoring and Communication. The new Philippine Climate Change Act of 2009 aims to mainstream climate change into policy formulation, development planning, and poverty reduction programs. The new law ushers the creation of a Climate Change Commission as the policy-making body responsible for coordinating, monitoring and evaluating government programs and action plans relating to climate change. Emerging private sector-led initiatives from business and the academe are becoming strong voice mechanisms on climate change issues.

## UN-HABITAT'S CITIES IN CLIMATE CHANGE INITIATIVE

UN-HABITAT launched the Sustainable Urban Development Network (SUD-Net), an innovative network of global partners, promoting inter-disciplinary approaches to sustainable urban development.

The Cities in Climate Change Initiative (CCCI) is the flagship programme of SUD-Net. The initiative aims to strengthen the climate change response of cities and local governments. Cities are key drivers of climate change due to their high energy consumption, land use, waste generation and other activities that result in the release of the vast majority of greenhouse gases. At the same time, it is cities, and in particular the urban poor, in the developing world, that are most vulnerable to and have the least resilience against, for example, storms, floods, and droughts. Cities need to respond to Climate Change by cutting their greenhouse gas emissions (mitigation). The negative impact of climate change seems however unavoidable and for most cities in developing countries adaptation to the risks is a must.

The Cities in Climate Change initiative brings together local and national governments, academia, NGOs and

international organizations with the aim to alert cities to the action they can take and by strengthening capacities of cities and their partners to respond to Climate Change. The key components of the Cities in Climate Change initiative are:

- Advocacy, policy dialogue and policy change
- Tool development and tool application
- Piloting climate change mitigation and adaptation measures
- Knowledge management and dissemination, through, amongst others, the UN-HABITAT partner universities and the partnership with UN-HABITAT's Local Government Training Institutes Network.

Initially four cities, Esmeraldas in Ecuador, Kampala in Uganda, Maputo in Mozambique and Sorsogon in the Philippines participated in the Cities in Climate Change Initiative as key partner cities. An additional 5 cities from Africa Bobo Dioulasso in Burkina Faso, Kigali in Rwanda, Mombasa in Kenya, Saint Louis in Senegal and Walvis Bay in Namibia have joined the initiative since July 2009. Cities in 9 Asian Countries are preparing to join CCCI.



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Seawalls protecting vulnerable communities living along the coastlines have been damaged due to strong typhoons that visit the city every year © UN-HABITAT/Bernhard Barth