

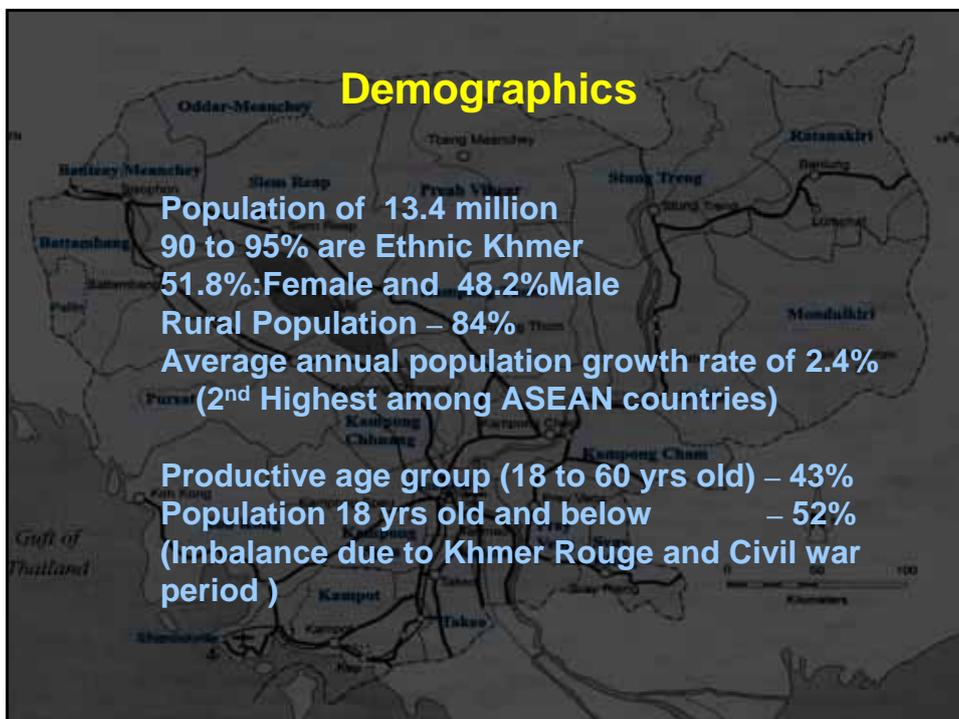
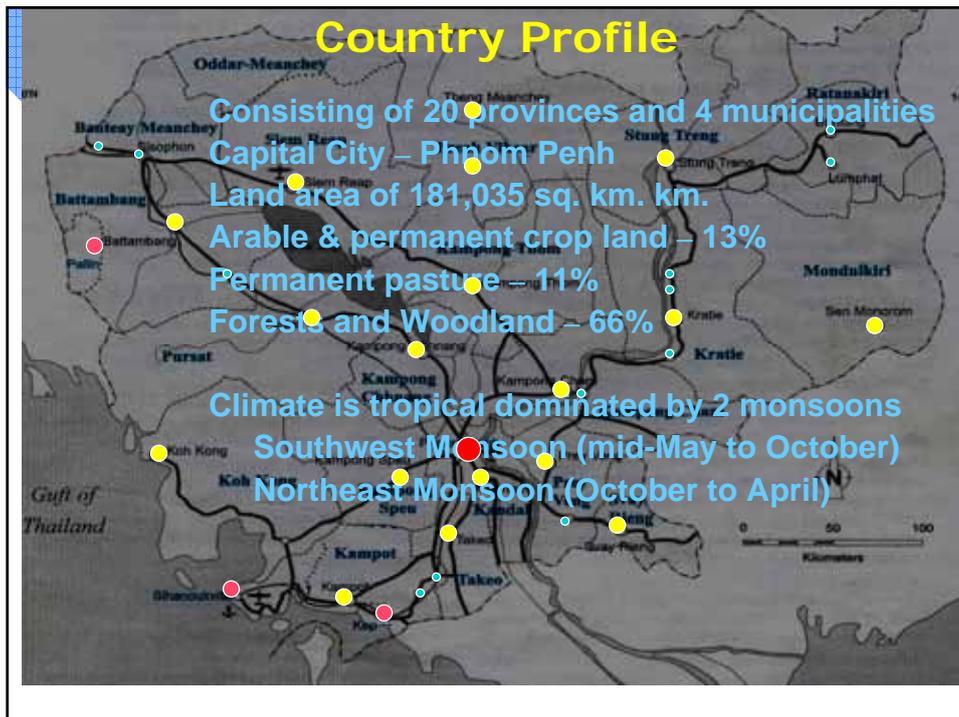


INTRODUCTION

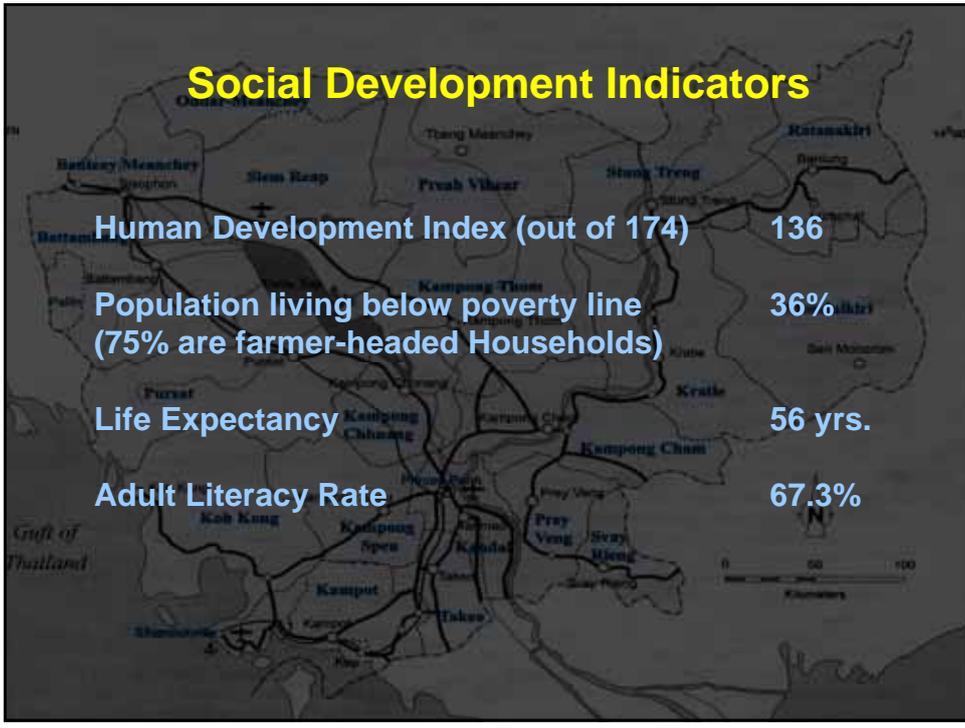
Country Profile

**Natural Disaster in
Cambodia
Impact of Disaster**

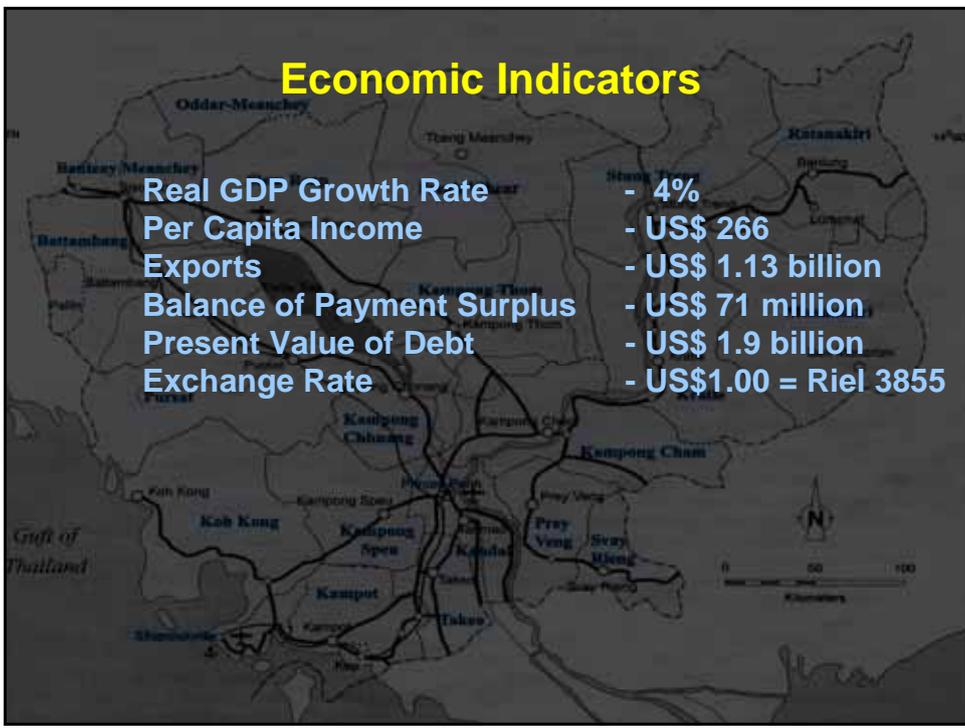
**National Committee for Disaster
Management
Disaster Management and
Countermeasures
Damage and Need Assessment**

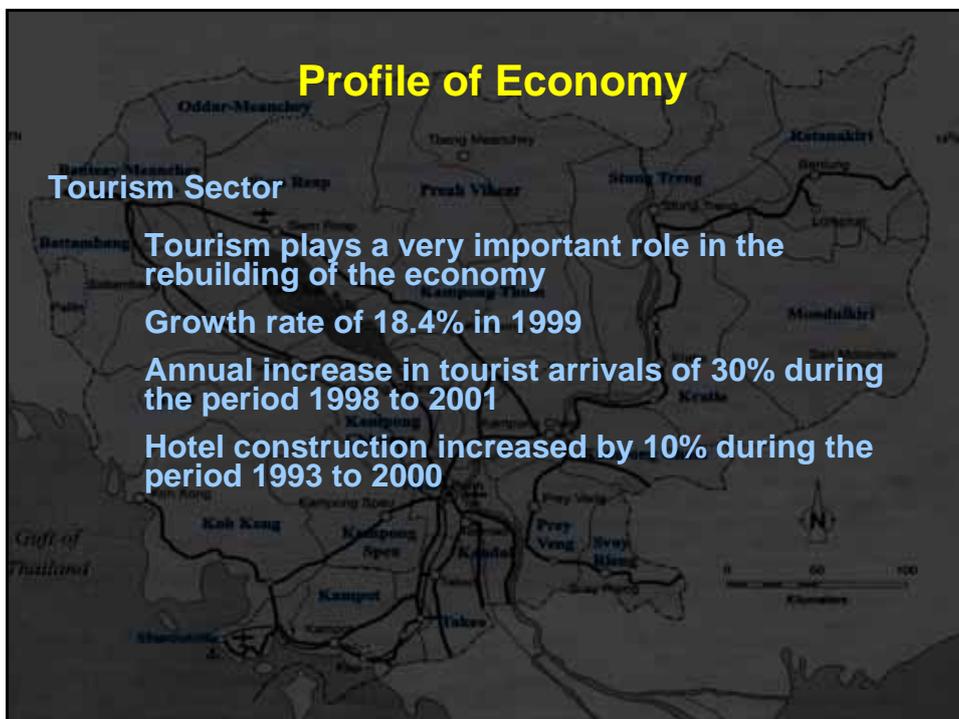
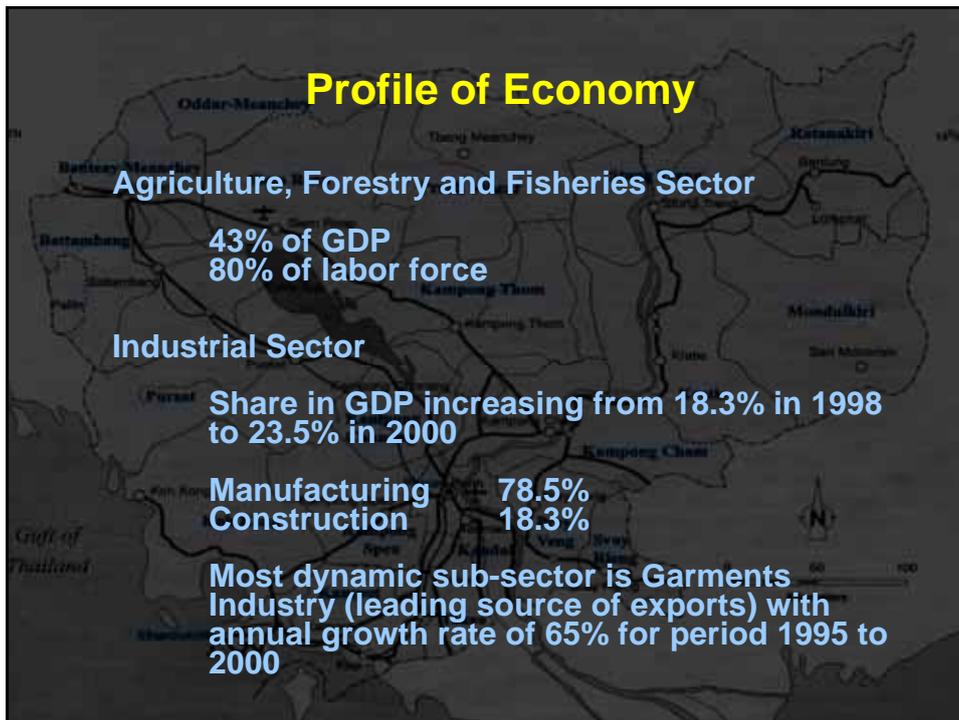


Social Development Indicators



Economic Indicators





Natural Disasters in Cambodia

-FLOOD

-DROUGHT

-STORM

-FIRE

Disaster Data 1988-1998 (CRED, 1999)^[1]

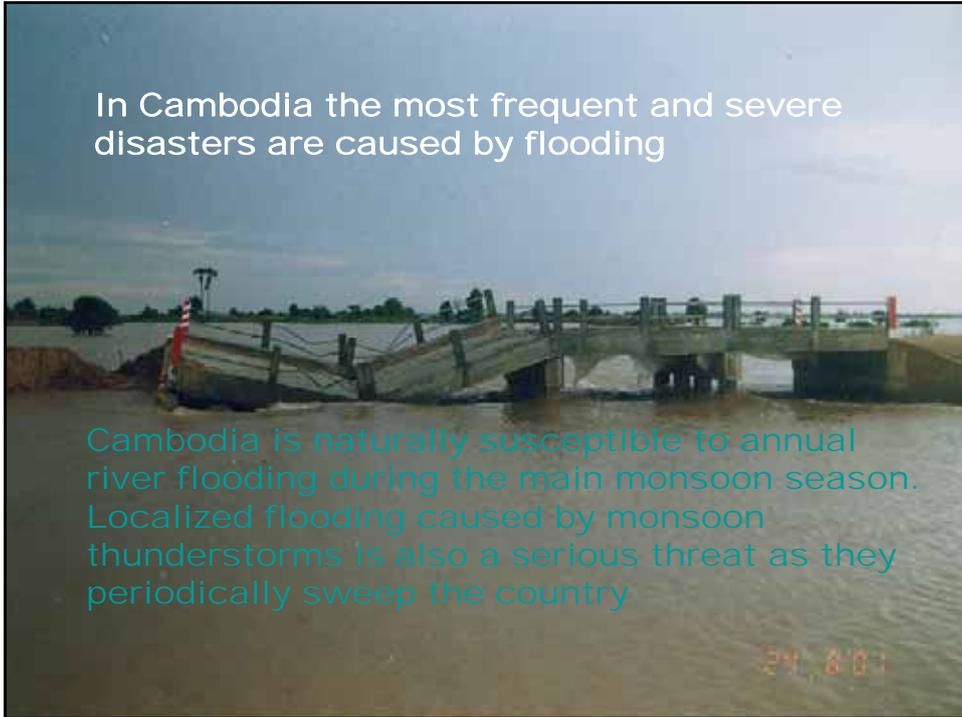
| Country | Total Events | People Affected | People killed | D | E | FLD | F | W/S | LS | V | O |
|-----------|--------------|-----------------|---------------|---|----|-----|---|-----|----|----|----|
| Cambodia | 10 | 8,274,564 | 730 | 3 | 0 | 3 | 0 | 0 | 0 | 0 | 4 |
| Indonesia | 76 | 3,499,811 | 7,535 | 6 | 18 | 22 | 4 | 2 | 3 | 11 | 10 |
| Laos | 13 | 820,016 | 747 | 3 | 0 | 4 | 0 | 3 | 0 | 0 | 3 |
| Myanmar | 10 | 4,605,372 | 188 | 0 | 1 | 8 | 0 | 1 | 0 | 0 | 0 |
| Vietnam | 53 | 16,300,880 | 9,096 | 1 | 0 | 15 | 0 | 30 | 2 | 0 | 5 |

D = drought, E = earthquake, FLD = floods, F = fire, W/S = wind/storm, LS = landslide, V = volcano, O = others

[1] Source : CAMBODIA, International Federation of the Red Cross Country Assistance Strategy 2001-2002, June 2000

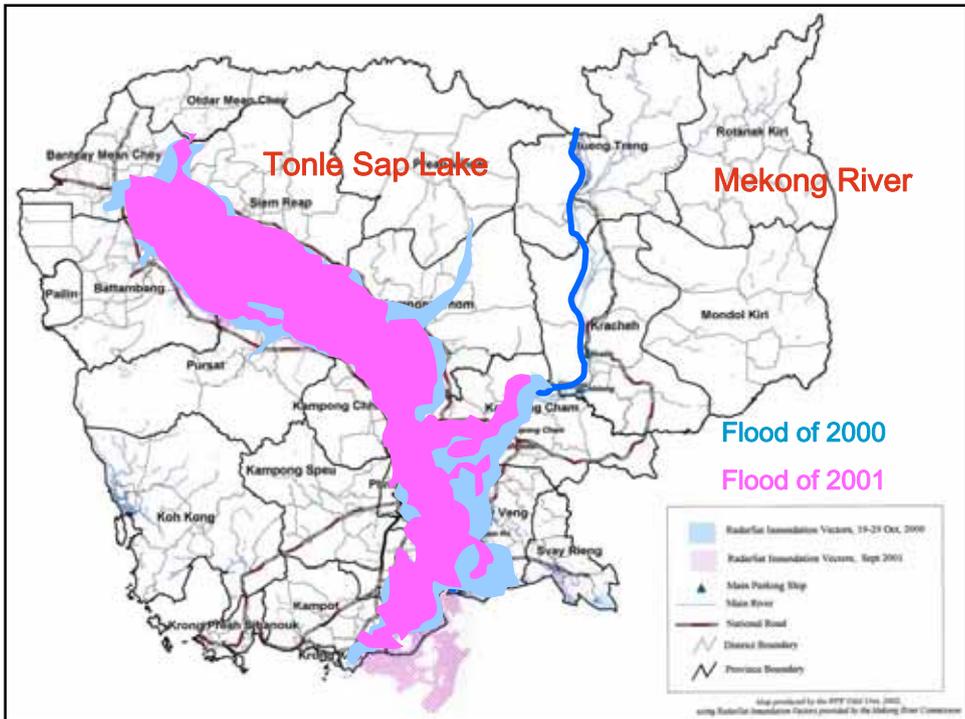
In Cambodia the most frequent and severe disasters are caused by flooding

Cambodia is naturally susceptible to annual river flooding during the main monsoon season. Localized flooding caused by monsoon thunderstorms is also a serious threat as they periodically sweep the country



Severe flooding has occurred in 1961, 1966, 1978, 1984, 1991, 1996, 2000 and most recently in 2001





Impact of Disasters

Floods of 1996

In the 1996 floods, continuous heavy rainfall in China, Laos, Vietnam and Cambodia inundated the Mekong River affecting 1.3 million Cambodians with 600,000 hectares of crops and 50,000 homes damaged or destroyed

Floods of 2000

- Worst flood to hit the country in more than 70 years.
- Total physical and direct damage was estimated at US\$ 150 million, 40% of the total estimated damages of US\$ 400 Million in the four countries in the Mekong River basin including Laos, Cambodia, Vietnam and Thailand.
- Death toll at 347 (80 percent of whom were children).
- Some 750,618 families (3,448,629 individuals) affected by flooding, about 85,000 families had to had to be evacuated.

Floods of 2001

- Affected Provinces/Municipalities: 14, Districts: 84, Communes: 595
- Victims Affected: 429,698 families, equivalent to 2,121,952 people
- Affected population who had food shortage caused by flood: 192,284 families, equivalent to: 945,665 people
- Rice partially damaged by flood: seedling 7,739 Has, Transplanted 23,7275 Has
- Rice totally destroyed by flood: seedling 5,732 Has, Transplanted 144,386 Has

Floods of 2001

- People killed: 62 (70% were children)
- Houses destroyed: 2,251 houses
- National roads destroyed: 39Km
- Rural roads destroyed: 7,937Km
- Bridges destroyed: 175 places
- Schools affected by flood: 911
- Health centers affected by flood: 45
- Irrigation systems destroyed: 201 places

WHAT IS TOOK CAMBODIA IN FLOODING

The main problems to be consider on cause of flooding

- The increasing frequency of exstreme climate event called La Nina (cold episode)
- Environment degradation and recurring El Nino (warm episode) extreme climate events.
- disforestration



In recent years, there has been an imbalance in the distribution of monsoon rainfall which has resulted in **drought** in some parts of the country

A short dry spell of 20 to 30 days during the rainy season (May – November) can result to extensive damage to crops

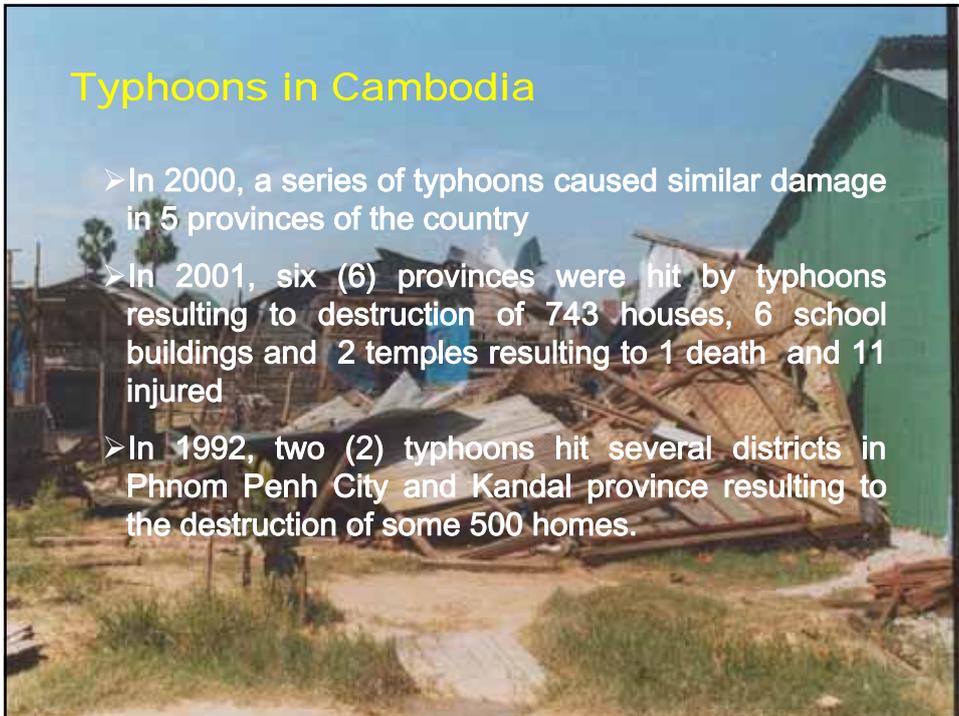
Prolonged drought was experienced in 1997 to 1998. And in 2001, while still recovering from the effects of the flood of 2000, Cambodia was also affected by severe drought

Drought in 2001

- Affected population who had food shortage caused by drought: 132,711 families, equivalent to: 530,844 people
- Rice partially damaged by drought: seedling 13,361 Has, Transplanted 89,787 Has
- Rice totally destroyed by drought: seedling 8,696 Has, Transplanted 45,291 Has

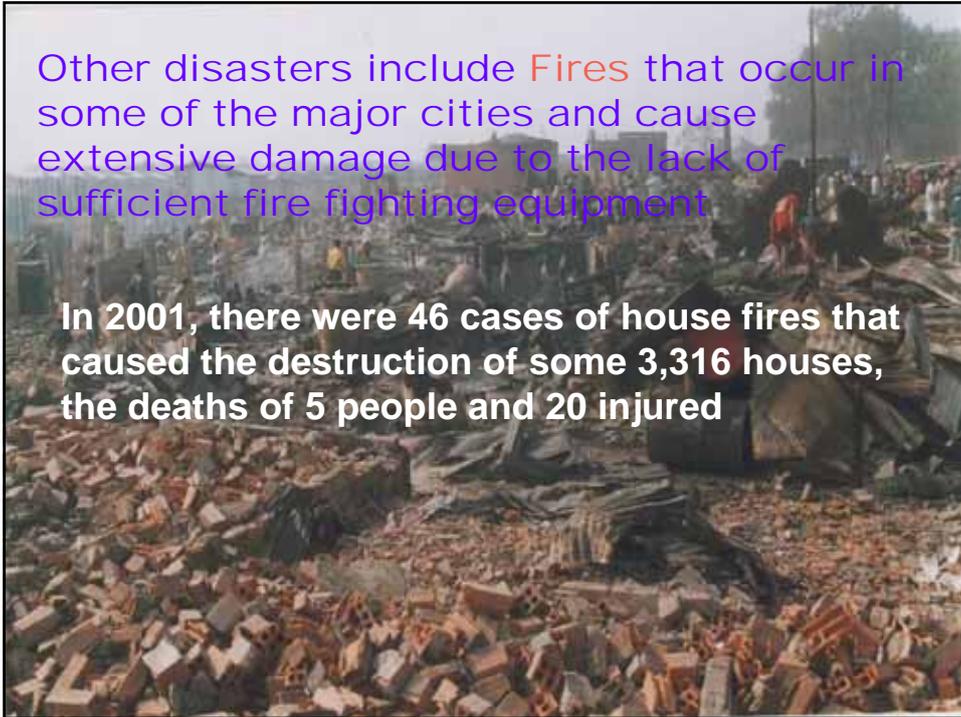
Typhoons in Cambodia

- In 2000, a series of typhoons caused similar damage in 5 provinces of the country
- In 2001, six (6) provinces were hit by typhoons resulting to destruction of 743 houses, 6 school buildings and 2 temples resulting to 1 death and 11 injured
- In 1992, two (2) typhoons hit several districts in Phnom Penh City and Kandal province resulting to the destruction of some 500 homes.



Other disasters include **Fires** that occur in some of the major cities and cause extensive damage due to the lack of sufficient fire fighting equipment

In 2001, there were 46 cases of house fires that caused the destruction of some 3,316 houses, the deaths of 5 people and 20 injured



The Royal Government of Cambodia

**National Committee for Disaster
Management (NCDM)**

Royal Government of Cambodia

National Committee for Disaster Management

Mission

To lead the Disaster Management in the Kingdom of Cambodia.

Functions and Responsibilities

- To coordinate with the Ministries of the Royal Government, UN agencies, IOs, NGOs, International Communities, National Associations, and Local Donors in order to appeal for aid for Emergency Response and Rehabilitation.
- To make recommendations to the Royal Government and issue principles, main policies and warnings on Disaster Preparedness and Management cum the measures for Emergency Response and interventions in evacuating people to haven.

Royal Government of Cambodia

National Committee for Disaster Management

- To disseminate Disaster Management work to Communities and strengthen the line from the National level (Ministries / Institutions concerned) to the provincial/ Municipal/ District/ Precinct level along with human resource development aiming to manage Disaster works firmly and effectively.
- To put forward a proposal to the Royal Government on reserves, funds, fuel, means of working, equipment and human resources for Disaster Prevention and intervention in Emergency Response and Rehabilitation before, during, and after disaster,

NCDM Organizational Structure



NCDM Organizational Structure



Inter-Agency Coordination Mechanism

Emergency Coordinating Group

Lead: NCDM

In coordination with CRC, IFRC, UN-DMT)

- **Emergency Relief Assistance Sub-Group**
Lead: NCDM and Cambodian Red Cross (CRC)
- **Food Security and Infrastructure Sub-Group**
Lead: Ministry of Agriculture & Ministry of Transport and Public Works
- **Health Sub-Group**
Lead: Ministry of Health
- **Water & Sanitation & Small Scale Infrastructure**
Lead: Ministry of Rural Development

Royal Government of Cambodia
National Committee for Disaster Management (NCDM)

**Disaster Management
and Countermeasures**

Strategic Planning

Assisted by the International Red Cross Federation (IFRC), UN World Food Program (WFP) and International Institute for Disaster Risk Management (IDRM) in coming out with:

- National Workshop to review Disaster and Disaster Management activities in Cambodia
- Joint Assessment of Capacity and Capability of Cambodian Government's NCDM
- Five (5) Year Institutional Development Plan
- Two (2) Year Action Plan

Policy Development

- Issuance of New Sub-decree on the function and organization of NCDM
- New Circular No.1 SR containing provisions on:
 - ✓Function and organization of provincial, district and commune level committees for disaster management
 - ✓Coordination with government ministries and IOs and NGOs
 - ✓Damage and Needs Assessment systems and procedures

Capacity Building

- WFP (World Food Program) support on Damage and Needs Assessment systems and procedures, training and on-the-job coaching for NCDM staff through technical assistance of IDRM
- WFP-NCDM workshop on Vulnerability Analysis and Mapping
- Mekong River Commission (MRC)-NCDM workshop on Early Warning Systems and Flood Forecasting
- ADRC support NCDM by provided Resaerching Study to NCDM Officials and Cooperative Project on Human Resources Development on Disaster Management.
- DANIDA support for Pilot Community-based Public Awareness Project through technical assistance of ADPC

Disaster Management Information System

- Proposal for design and installation of Disaster Management Information System (DMIS) and strengthening capacity building at the NCDM submitted to European Commission Humanitarian Aid Office (ECHO) through the United Nation for Disaster Management Team (UNDMT)

National Committee for Disaster Management (NCDM)
Disaster Management & Countermeasures

Coordination with NGOs

Cambodian Red Cross (CRC) – Community-based Disaster Preparedness, Small-scale mitigation projects, Safe area development, disaster response and relief

CARE Cambodia – Community-based Disaster Preparedness project in Prey Veng province, disaster planning and training for DCDMs, donation of equipment (i.e., radios and boats), relief

Action Against Hunger (AAH) – Disaster Preparedness, Small-scale mitigation projects, Proposed Community-based Early Warning project in Kampong Cham province

OXFAM Cambodia – Disaster preparedness, response and relief, proposed Community-based Disaster preparedness in Takeo province.

Development

On

Damage and Need Assessment Format

- 1-Risk Monitoring Report
- 2-Flash-Report
- 3-Initial Report(IR)
- 4-District Level Damage Report
- 5- Provincial Damage Report
- 6- National Report



National Assessment and Strategic Planning





Emergency -Response



Damage and Needs Assessment



Resource Mobilization

1000s Navy forces were trained for Emergency - Relief



Mobile Home Project assisted by local donors



Total Project cost at USD300,000

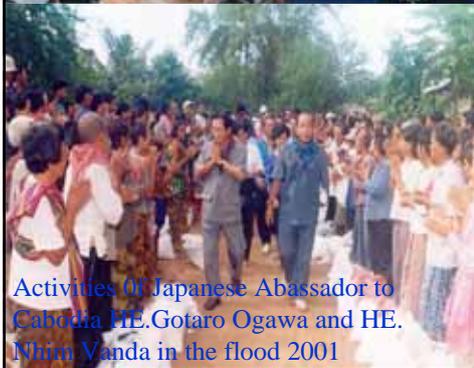


The Queen and The CRC Head activities in flood 2001



Disaster Relief

The Prime Minister activities in providing food to the victims



Activities Of Japanese Abassador to Cambodia HE. Gotaro Ogawa and HE. Nhim Vanda in the flood 2001



JICA Head and HE. Nhim Vanda are distibuting Japan aid to the victims in flood 2001

