International Institute for Global Health (UNU-IIGH)

Role of UNU-IIGH in Capacity Building For Sustainable Global Health

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Outline

- What is Globalisation?
- Globalisation and The Economy
- Globalisation and Health
- Health Issues Related To Globalisation
  - SARS
  - Avian Influenza
  - Tsunami Disaster
- Role of UNU-IIGH
- Current Collaborative Projects
- Conclusion

Globalisation.....

- World become single entity
- Increased movements of information, services and people
- Across borders of countries
- Facilitated by
  - IT : improved communication
  - Policies on various sectors

Globalisation is……

- A set of processes intensifying human interaction across economic, political, socio-cultural, environmental and technological realms.
- These changes are evident across spatial, temporal and cognitive boundaries.

  - *Kelly Lee (LSHTM)*

Globalisation and Economy

- From economic perspective, globalisation is characterised by
  - Increase in international trade
  - Foreign Direct Investment
  - Capital Market Flows
- “Openness” of individual countries economy to the rest of the world
- Hotly debated in the last decade
  - May have been happening for a long time
  - Accelerated recently

Globalisation: The promise...

- Globalisation leads to faster growth and poverty reduction in poor countries
  - World Bank Report, 2001
- Economic growth increase the income of the poor
- Spread of technologies through globalisation lead to
  - Reduction in infant mortality rate
  - Increase in life expectancy
  - Reduction in illiteracy rate
  - More effective surveillance system to control of diseases

Globalisation: The promise...

- According to views of World Bank and IMF
- Trade openness raise per-capita income and income of the poor
  - 1% increase in the ratio between trade and GDP will raise per capita income by 1.5% to 2.0%
- Trade openness allows developing countries to import capital equipment and intermediate input
  - Can be used for long term growth

Globalisation: The reality ...

- Poverty reduction slow and uneven
- Number of people living with less than USD 1 per day
  - 1990: 1.2 billion
  - 2000: 1.0 billion
- Number of people living with less than USD 2 per day
  - 1990: 2.65 billion
  - 2000: 2.74 billion

Globalisation: The reality ...

- Overall poverty rate reduced from 28% to 21%
  - Mostly occur in East Asian region
  - 1.8 billion people
  - Increase in population contribute to the fall
- Poverty rate remained unchanged in
  - Latin America
  - Sub-Saharan Africa
  - Middle East & North Africa
- Poverty rate raised in Europe and Central Asian
  - Especially in former Soviet Union
  - Transition from Socialism to Market Economy

Table 1: Population living below US$1 per day in developing countries 1990 and 1998				
	Number of people below US$1 a day (millions)		Poverty Rate (%)	
	1990	2000 (estimate)	1990	2000 (estimate)
East Asia	470	261	29.4	14.5
Excluding China	110	57	24.1	10.6
South Asia	466	432	41.5	31.9
Sub-Saharan Africa	241	323	47.4	49
Latin America	48	56	11	10.8
Middle East/N.Africa	5	8	2.1	2.8
Europe & Cent. Asia	6	24	1.4	4.2
Total	1237	1100	28.3	21.6
Source: World Bank. Global Economic Prospects 2004. (2003).				

Globalisation: The reality …

- Globalisation leads to income inequality
  - Between 1988 and 1998 global poverty fell by only 0.2% per year
  - By 1990, high income countries which represent only 14% of the world population accounted for more than three fourths of the world income
  - One billion people control 80% of the world GDP while another one billion people struggle with less than USD 1 per day
  - Global Gini Coefficient rose 3 points between 1988 to 1993

Poverty Reduction and Globalisation

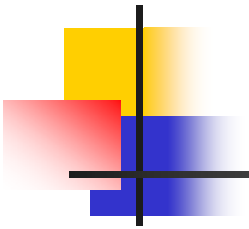
- Trade Openness does not reduce poverty
  - Globilizers: China, Thailand and Vietnam
    - Strong Economic Growth
    - Good Poverty Reduction Programme
    - Export more than Import
    - Fairly restrictive trade barriers
  - Brazil,Haiti, Mexico and Peru
    - World beaters in Import Liberalization
    - Poor Poverty Reduction
    - Weak Economic Growth

Trade Openness

- Selective Trade Openness
  - Rich countries preach for trade openness but protect their market to developing countries
  - Poor countries lose USD 50billion a year to tariff when entering global market
    - Labour intensive manufacturing
    - Agriculture
  - Rich countries protect against over-production and export dumping
    - $ 1 Billion a day (Trade Subsidy)

What is the reality?

- International Trade
  - Every USD 1 generated through export activity, USD 0.75 goes to the richest countries. Only $ 0.03 goes to low income countries
- Increase income accompanied by
  - Exploitations of workers
    - Child Labour
    - Female Workforce
  - Erosion of workers' rights
- Non-income dimensions of poverty being ignored
  - Self-respect, Security, Health



Globalisation and Health

Health and Public Health

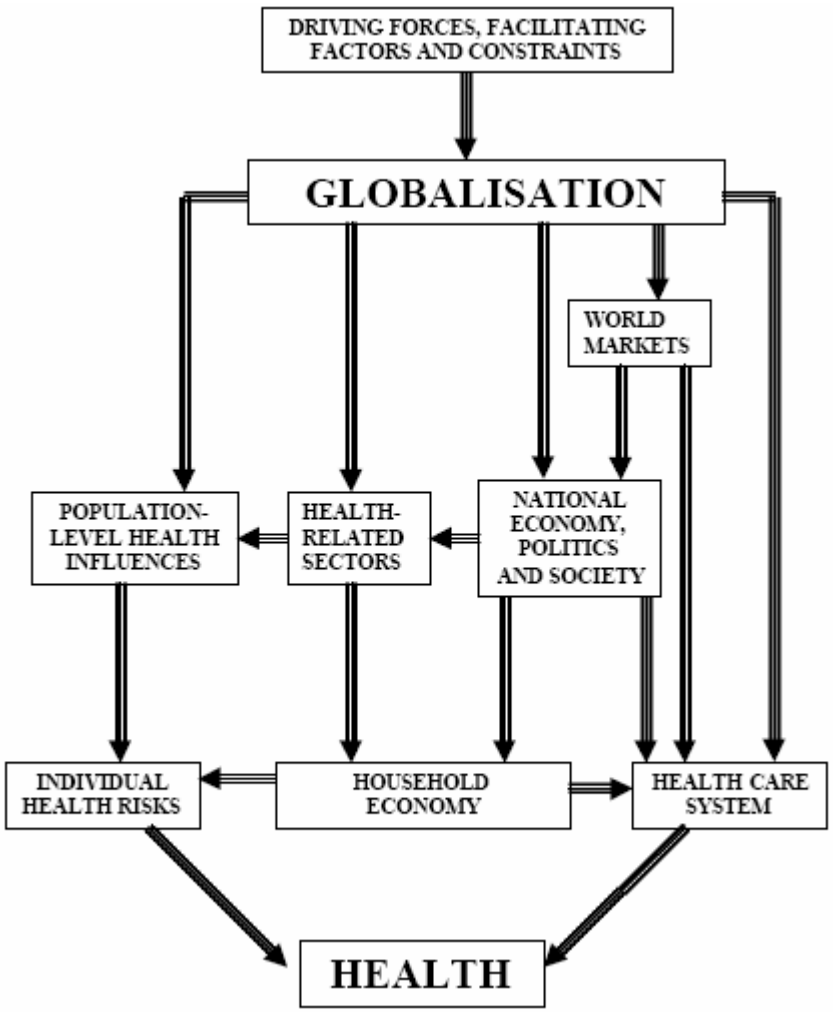
- Health
  - State of physical, mental and social well-being and not merely the absence of diseases or infirmity
    - WHO
- Public Health
  - Science and Art of preventing diseases, prolonging life and promoting physical health and efficiency through.....
    - Winslow (1923)

Globalisation: Opportunities or threat to health?

'All the indications are that the current forms of globalisation are making the world a safe place for unfettered market liberalism and the consequent growth of inequities. This economic globalisation is posing ***severe threats*** *to both people's health and the health of the planet.'*

Professor Fran Baum
Flinders University, Australia (2001)

Conceptual Framework



Woodward et al, 2001

Impacts of Globlisation on Public Health

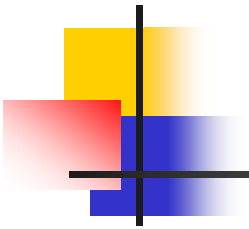
- Spread of Communicable Diseases
  - SARS Outbreak
  - Avian Influenza
- Trade Liberalisation and Health
  - Access to Medicine and Drugs
  - Tobacco trade
- “Forced adoption” of adverse health policies
  - Privatisation
  - User fees
  - Private Health Insurance

Globalisation and Communicable Diseases

- Improvement in surveillance system
  - IT and Early Warning System
    - Can detect diseases early
    - Control Outbreak fast
- Good Transportation and Communication
  - Able to send experts fast to the area of outbreak

Globalisation and Communicable Diseases

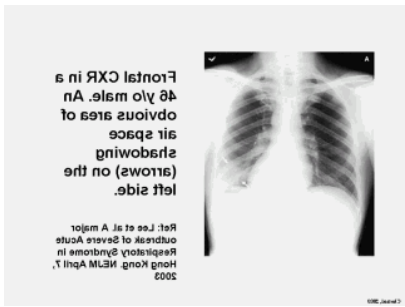
- Problems
  - Rapid transportation spread diseases faster
  - Lack of good data in developing countries
    - Early warning system does not work because data only from public health care system
    - Disintegration between public & private system
  - Bureaucracy
    - Delay to dispatch experts to areas of outbreak.



SARS EPIDEMIC

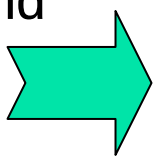
SARS - The Epidemic

- Epidemics began in November 2002
  - Continued for 9 months
  - 5th July 2003- WHO reported that chain of transmission of SARS has been broken
- Total Cases = 8,422 (7th August 2003)
  - In 32 Countries
- 20% of Cases are Health Workers
- Total No. of Deaths = 916
  - Case fatality rate of 11%
    - Range from 7% in China to 27% in Taiwan

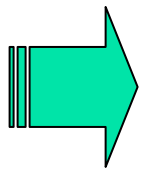


Factors Leading To Emergence Of SARS Epidemics

- Changes in Demographic and Behaviour
- Changes in Technology and Industry
- Environmental Change and Land Use
- International Travel and Commerce
- Microbial Adaptation and Change
- Breakdown in Public Health Measures

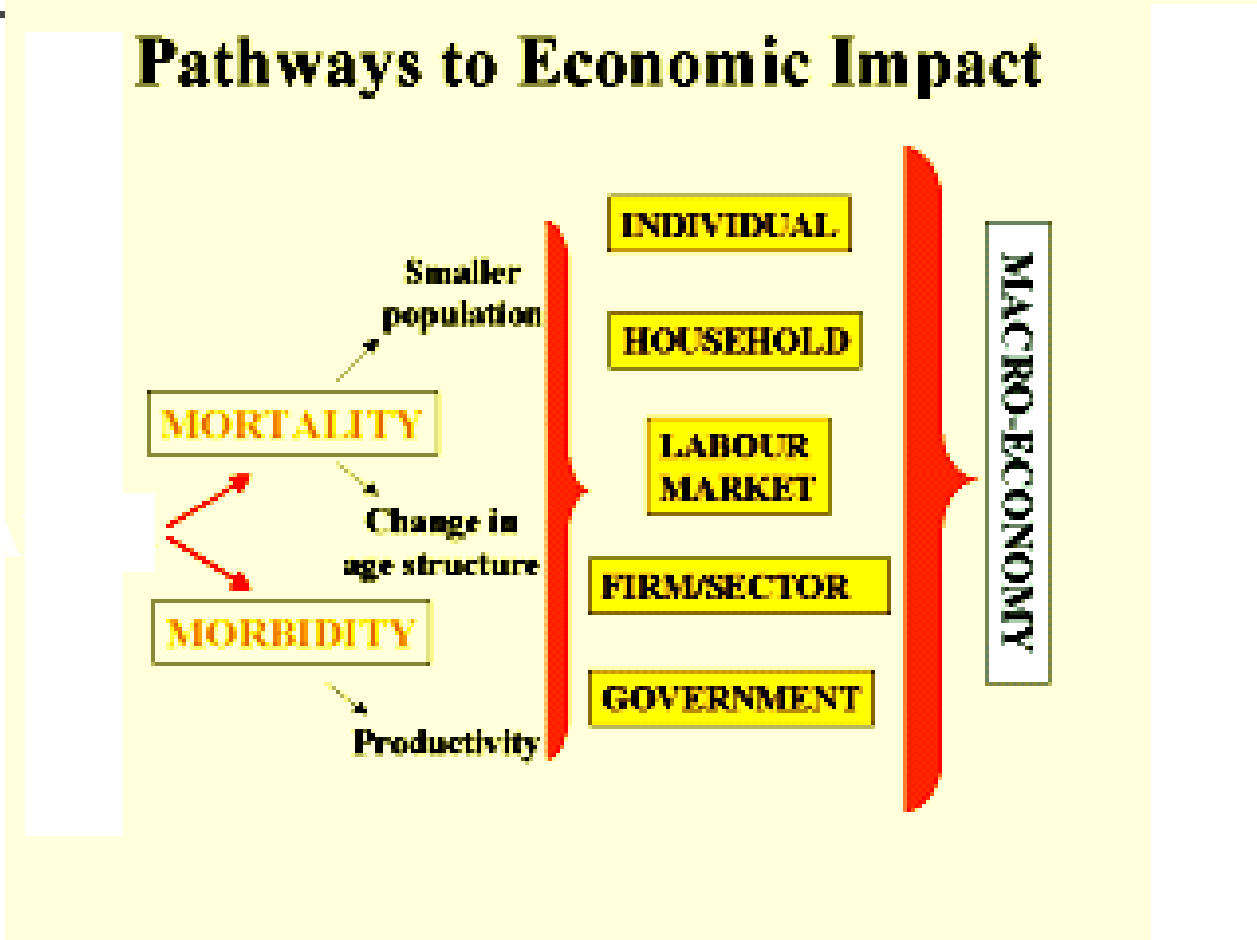


- Increase in Host Susceptibility
- Increase in Disease Transmission



SARS

Economic Impact of SARS: Concept



Global and Regional Impact

- WHO
  - Estimates global costs of SARS is approaching USD 30 billion
- World Bank
  - Economic growth in Asia reduced by 0.8% i.e from 5.8 to 5%
- ADB
  - Economic growth in Asia reduced by 0.3% to 5.3%
- ILO
  - Global Tourism Industry lost further 5 million jobs in 2003 due to SARS, terrorism and weak global economy

Economic Impact

- Countries mainly affected
  - China
  - Taiwan
  - Hong Kong
  - Singapore
  - Canada

Addressing SARS Epidemic

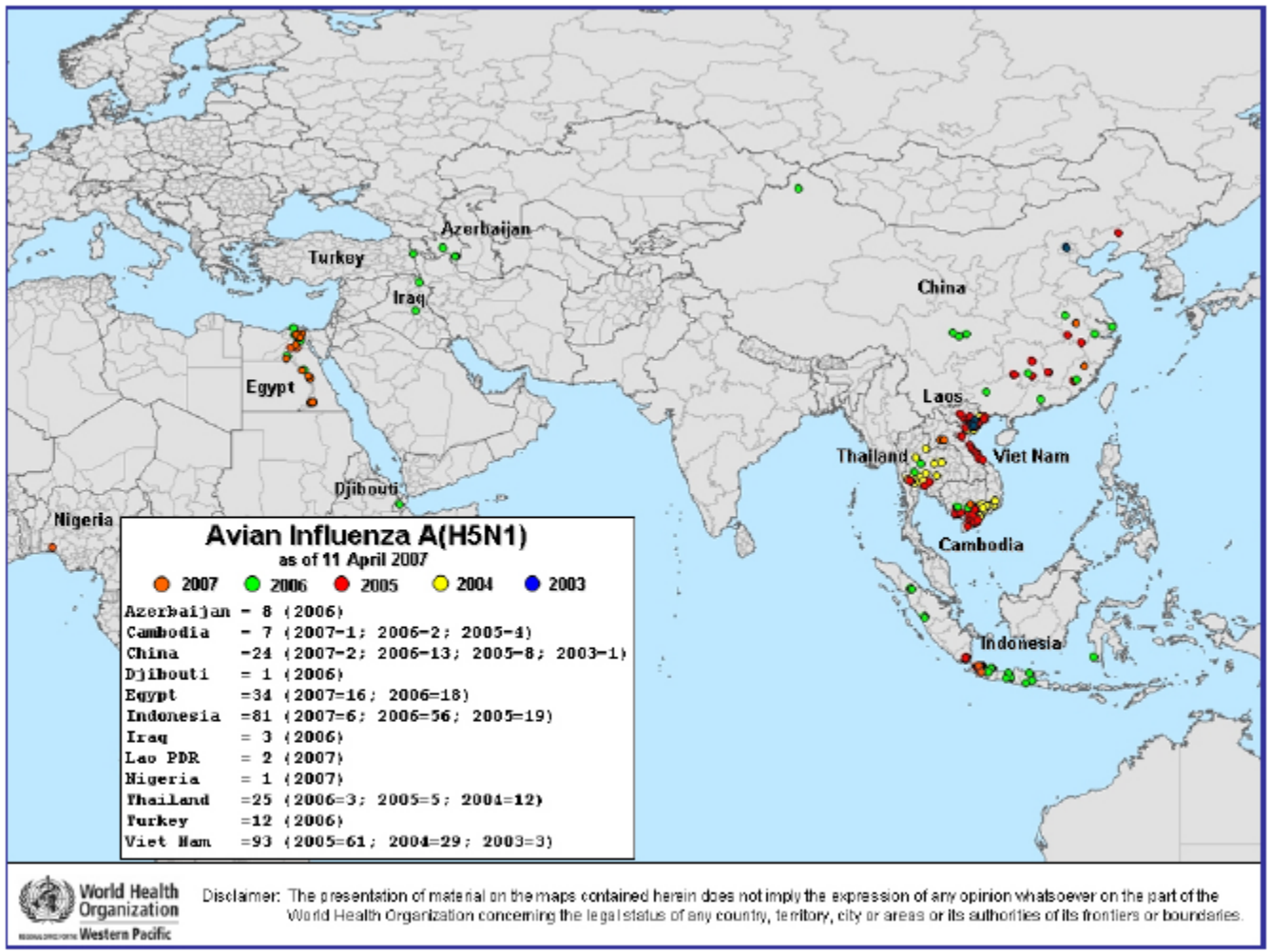
- Enhancing global response capacity
- Improving global infectious disease surveillance
- Rebuilding public health capacity
- Educating and training multidisciplinary taskforce
- Developing diagnostics
- Other strategies
  - Vaccine Development and production
  - New anti-microbial drugs

Avian Influenza

The Pandemic

- Started in 2003
- Agent: H5N1 Virus
- Mostly affected areas are East and South East Asia
- Outbreaks in other region: Croatia, Kazakhstan, Mongolia, Russia, Turkey and Ukraine
- Human Cases: 292 cases (from 2003 – April 2007)

The Pandemic…



Economic Impact

Table 2. Cost Estimates by Region, Income Level, and AHI Risk Status ($ 000)

Region	*Infected countries*	*Newly infected countries*	*High-risk countries*	*Low/moderate-risk countries*	*Total*
AFR	0	0	137,907	9,200	147,107
EAP	565,907	3,473	63,813	2,000	635,193
ECA	0	146,994	76,791	800	224,585
LCR	0	0	0	9,200	9,200
MNA	0	0	108,925	1,200	110,125
SAR	0	0	73,643	2,400	76,043
Total	**565,907**	**150,467**	**461,079**	**24,800**	**1,202,253**
Contingency (20%)					**240,451**

Note. AFR: Africa Region; EAP: East Asia and Pacific Region; ECA: East Europe and Central Asia Region; LCR: Latin America and Caribbean Region; MNA: Middle East and North Africa Region; SAR: South Asia Region.

Economic Impact

Table 2 Possible economic impacts of flu pandemic

	Mild	Moderate	Severe
(% change in GDP, first-year)			
World	-0.7	-2.0	-4.8
High-income	-0.7	-2.0	-4.7
Developing	-0.6	-2.1	-5.3
East Asia	-0.8	-3.5	-8.7
Europe and Central Asia	-2.1	-4.8	-9.9
Middle-East & North Africa	-0.7	-2.8	-7.0
South Asia	-0.6	-2.1	-4.9
Deaths (millions)	1.4	14.2	71.1

Source: World Bank calculations based on McKibbin & Sidorenko (2006).

Economic Impact

Table 3. A breakdown of economic impacts of a potential human-to-human pandemic

% of GDP

	Impact of:				
	Mortality[a]	Illness and Absenteeism[b]	Efforts to avoid infection[c]	Total	Total[d]
			(% of GDP)		($ billion)
World total	-0.4	-0.9	-1.9	-3.1	-1,526
High income countries	-0.3	-0.9	-1.8	-3.0	-1,131
Low and middle income countries	-0.6	-0.9	-2.1	-3.6	-405
East Asia and Pacific	-0.7	-0.7	-1.2	-2.6	-99
Europe and Central Asia	-0.4	-0.7	-2.3	-3.4	-83
Latin America and the Caribbean	-0.5	-0.9	-2.9	-4.4	-118
Middle East and North Africa	-0.7	-1.2	-1.8	-3.7	-25
South Asia	-0.6	-0.8	-2.2	-3.6	-37
Sub Saharan Africa	-0.6	-0.9	-2.2	-3.7	-26

Source: World Bank.

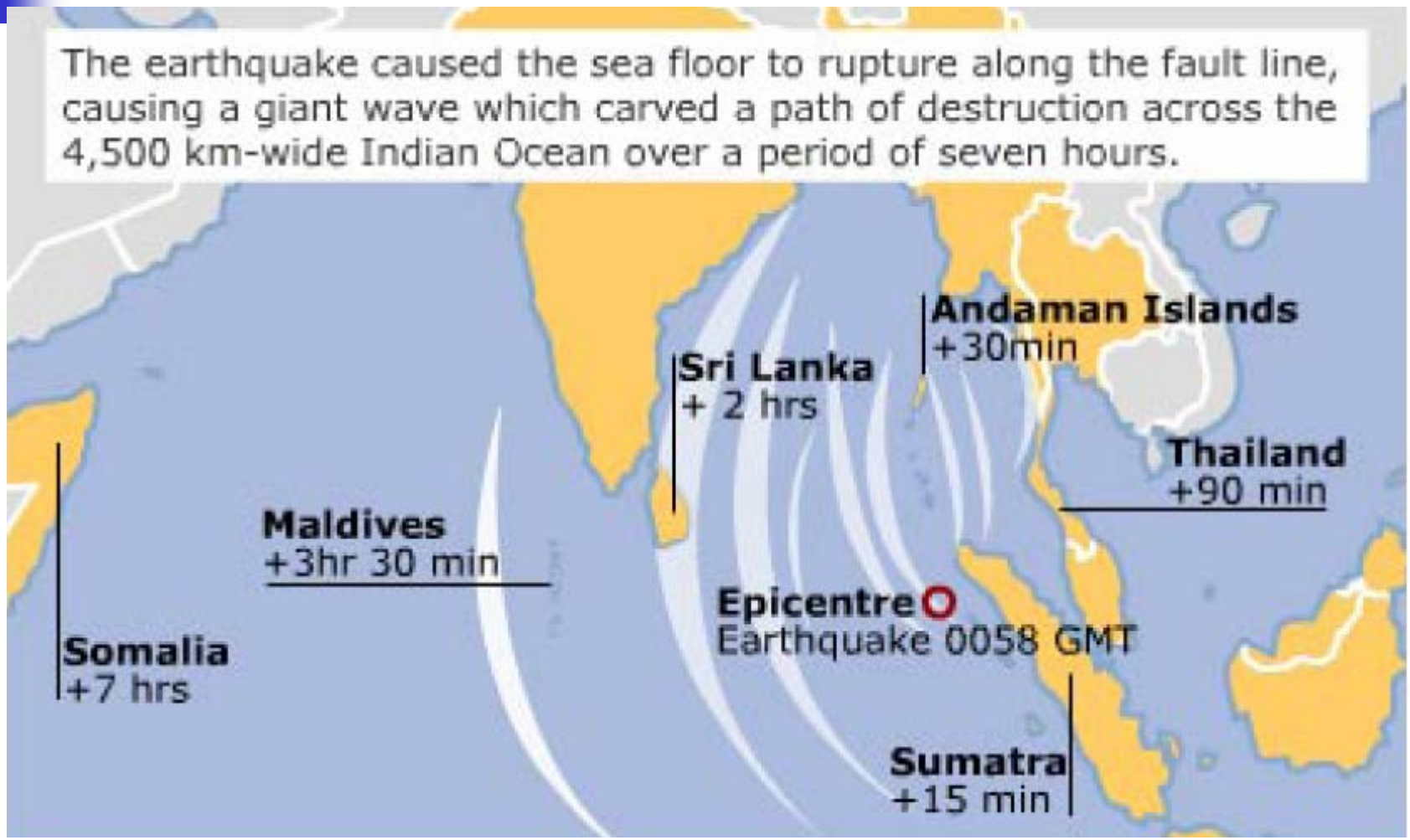
Major Disaster

Tsunami

Tsunami

- 26th December 2004
  - Biggest earthquake for 40 years
  - 0058 GMT
  - Epicentre in Indian Ocean
  - Triggered series of large waves
    - 7- 15 meters height
  - 4,500 km wide Indian Ocean
  - Over a period of 7 hours

Tsunami


The earthquake caused the sea floor to rupture along the fault line, causing a giant wave which carved a path of destruction across the 4,500 km-wide Indian Ocean over a period of seven hours.
Andaman Islands
+30min
Sri Lanka
+ 2 hrs
Thailand
+90 min
Maldives
+3hr 30 min
Epicentre
Earthquake 0058 GMT
Somalia
+7 hrs
Sumatra
+15 min

Impact of Tsunami: Aceh

Impact of Tsunami: Thailand

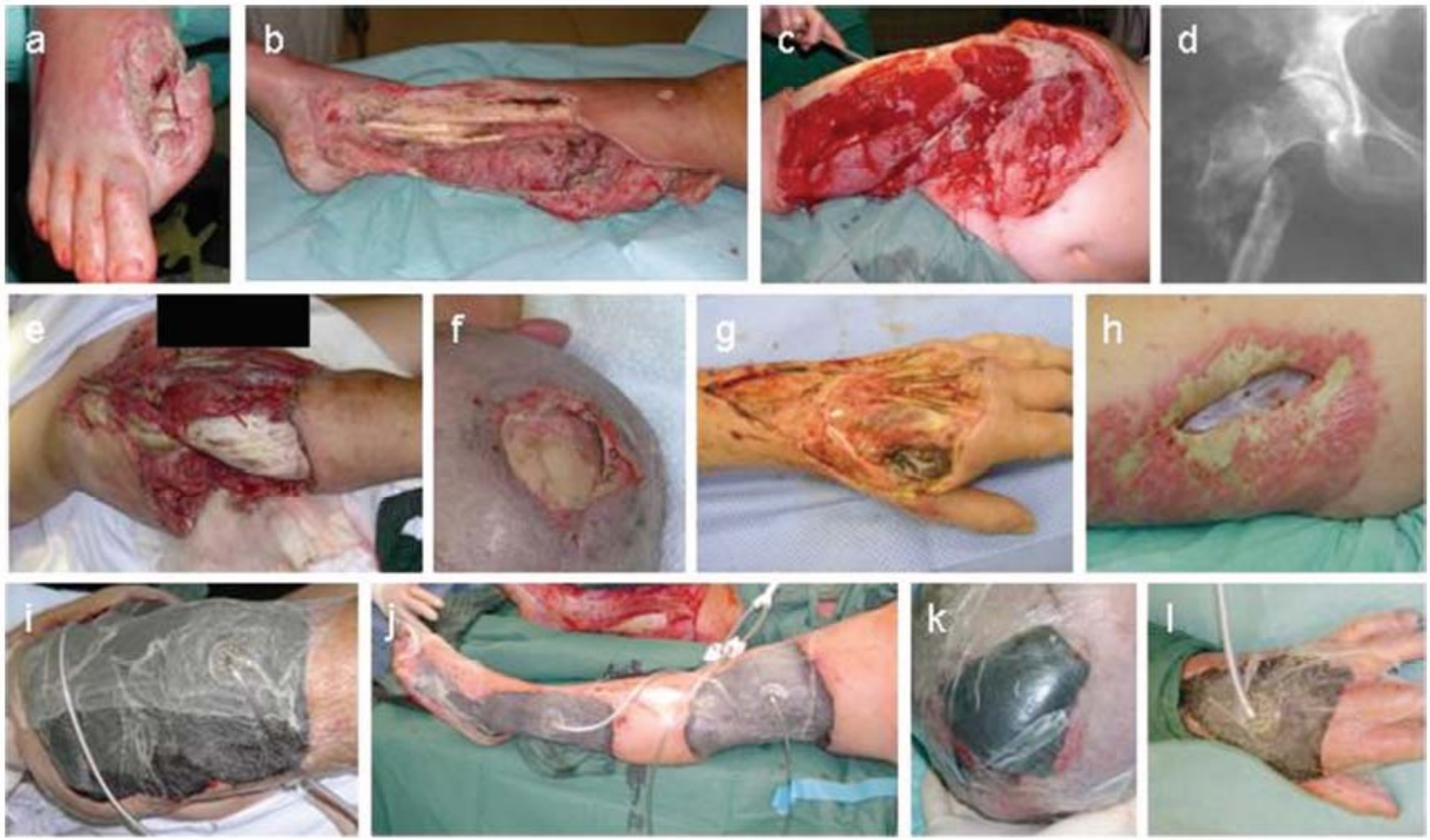
Health Impact

- Immediate
  - Injuries
    - Deaths
- Intermediate
  - Infections
    - Contaminated wounds
    - Pneumonia
  - Acute Diarrhea
- Long term
  - Social
  - Psycho-emotional
  - Malnutrition

Impact: Mortality and Morbidity

- Death
  - More than 300,000
  - In eight countries
    - Indonesia, India, Malaysia, Maldives, Seychelles, Somalia, Sri Lanka and Thailand.
- Missing
  - 50,000 people
  - Presumed Dead
- Displaced
  - 1.6 million people

Injuries related to Tsunamis



Psychosocial Impact of Tsunamis

- Mental Trauma
  - Loss of family members
  - Loss of homes and other belongings
  - Loss of jobs
  - Injuries
- Vulnerable groups
  - Children
  - Women
  - Elderly
  - Displaced people – “loss of homes”
  - Host families

Women and Children are the most vulnerable groups

Vulnerable Groups

- Children
  - Loss of one or both parents
    - Indonesia 8,316
    - India 1,744
  - Relatives may not be able to adopt orphans
  - Orphanage care inadequate

Vulnerable Groups

- Women
  - More likely to die than man
    - Unable to swim
    - Clothing
    - Return to beach to look for missing children
  - Sexual violence during disaster
  - Widows faced lengthy legal procedures to inherit belongings

Vulnerable Groups

- Elderly
  - High risks of dying
  - Special needs
    - Immobile
    - Poor hearing
    - Poor sight
  - Pre-existing chronic illness

Displaced Victims

Psychosocial Impact of Tsunamis

- WHO Estimates
  - February 2005
    - 20-40% suffer from short term mild psychological distress
    - 30-50% suffer from moderate to severe psychological distress
  - June 2005
    - Half of all victims has psychological problems
    - 5-10% requires treatment

Psychosocial Impact of Tsunamis

- Indonesia
  - 20-25% of children in Aceh required professional treatment for psychosocial problems
  - 15-20% in out-patients visits for anxiety and depression
- Thailand
  - A quarter of children in affected areas do not attend schools because of fear and distress

Impact on Health Services

- Areas affected faced resource constraints even before disaster
- Damaged to Health Care Facilities
  - Clinics
  - Hospitals
  - Equipment
- Loss of health manpower
- Sudden increase in workload

Impact on Health Services

- WHO estimates
  - 500,000 people with injuries that required treatment
- Thailand
  - 10,000 patients visits hospitals in the affected region within two weeks of Tsunami
    - 2,233 Admitted
    - 1,254 required Major Surgery
    - 398 placed in ICU

Impact on Health Services

- Indonesia
  - Health facilities
    - 240 Clinics in the area
      - 30 clinics completely destroyed
      - 77 seriously damaged
      - 40 minor damages
  - Health Workers
    - 9,800 staff in the area
      - 700 died or missing
      - 30% of all midwives died or missing

Impact on Health Services

- Thailand
  - Health Personnel
    - Ranong and Phang-Nga Province
      - Death
        - 7 Public Health Officers
        - 25 Public Health Volunteers
  - Health Facilities
    - Phuket Province
      - 3 health centres
    - Krabi Province
      - 1 Hospital
      - 18 public health centres

Economic Cost of Tsunami (World Bank Estimates, 2005 Millions, USD)

Country	Health Sector Damage and Losses	Total Damage and Losses
India	16	1,023
Indonesia	92	4,500
Maldives	5.6	470
Sri Lanka	60	1,000
Total	173.6	6,993

Role of UNU-IIGH

How it started....

- Millennium Development Goals (MDGs)
  - Adopted at UN Millennium Summit in September 2000
    - Call for dramatic reduction in poverty and major improvement in health of the poor
- WHO Commission for Macroeconomics and Health
  - Improving health and longevity of the poor
  - Health as a fundamental goals of economic development

How it started?

- UN Chief Executive of Board (CEB) Meeting in Paris in 2000
  - DG WHO (Dr Gro Burndtland and Rector of UNU- Hans van Ginkel)
  - Proposed the establishment of UNU- RTC on global public health delivery system
- UNU Council 47th Session in Macau in November 2000
  - Identify public health delivery system is a crucial issue in developing countries
  - Suggest New UNU RTC to focus in the area

Global Public Health Issues

- Newly Emerging and Re-emerging Diseases of Public Health Importance
  - SARS, Nipah outbreak, Avian Influenza, HIV/AIDS, Monkey Pox, Tuberculosis, Malaria
- Increase Global Burden of Non-Communicable Disease and Unhealthy Lifestyle
  - Diabetes Mellitus, Hypertension, Stroke, Obesity, Smoking
- Health Care Delivery System
  - Health Financing Issues, Efficiency, Equity, Access, Quality of Care

Why Malaysia is the choice?

- Strong in Public Health Delivery System Programme
  - Respectable Public Health Indicators
- High Commitment to Health and Access to Health
- High Human Development Index
- Strong Economic Growth
- Local Expertise in Public Health
  - WHO Consultants
  - World Bank Consultants

The Progress

- 10th December 2003
  - Approval by Malaysian Cabinet
    - Memorandum from Ministry of Education
    - No: 553/2381/2003
  - Contribution of USD 46.65 Million to Endowment Fund by Malaysian Government
- January 2003 – May 2006
  - Negotiations and preparation of MOU/MOA Documents
- 26th May 2006
  - Signing of MOU between MOHE and UNU in Tokyo
  - Witnessed by Prime Minister of Malaysia

Nature of the Institute

- International in character
- Intersectoral and Interdisciplinary in approach
- Networking with local institutions and other academic centres at regional and international level
- Focal point for health related issues in ASEAN Region, Other Parts of Asia and other developing countries

Potential Partners- Local

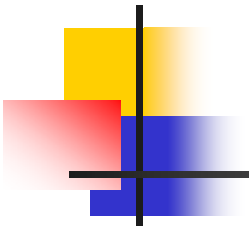
- Department of Community Health in Faculty of Medicine of Public Universities
  - UKM, UM, USM, UPM, UMS
- Foreign Universities in operating in Malaysia
- Ministry of Health
  - Public Health Division of MOH
- National Institute of Health
  - Public Health Institute
  - Institute of Medical Research
  - Institute of Health Services Research
  - Institute of Health Management
- Local Professional Organisations in Public Health
  - College of Public Health Medicine, Academy of Medicine
  - Public Health Medicine Specialists Associations

Potential Partners- International

- United Nations Organisation Bodies
  - WHO, UNDP, UNICEF, FAO,UNAIDS, ILO
  - Global Fund for AIDS, Malaria and Tuberculosis
- Other International Organisations
  - Global Alliance for Health
  - World Health Forum
  - IPPF (International Planned Parenthood Federation)
  - APACPH (Asia Pacific Academic Consortium For Public Health)
  - WPHA (World Public Health Association)

Potential Partners – UNU Institutes

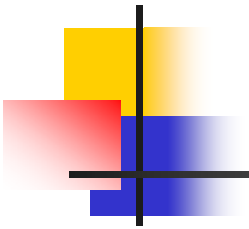
- UNU-WIDER (Helsinki, Finland)
  - Health Economics and Health Financing
- UNU-INTECH (University of Maastrich, Maastrich)
  - New Technologies and Biotechnologies
- UNU-INWEH (Montreal, Canada)
  - Water and Sanitation Issues
- UNU-BIOLAC
  - Biotechnology and Biosafety Issue
- UNU-Food and Nutrition Programme
  - Nutrition Issues
- UNU-Software Development (Macau)
  - Telemedicine
- UNU-EHS
  - Environment and Human Security



RESEARCH PROGRAMME

Areas of Research

- **Health Care System Reform**
- **Health Care Financing**
- **Health Care Policy Analysis and Development**
- **Impact of globalization on health care system**
- **Non-communicable diseases and control policies**
- **Management of Epidemics and Emerging Infectious Disease**
- **Telemedicine**



ACADEMIC PROGRAMME

Academic Programme

- Post-doctoral Programme
- PhD Internship Programme
- Masters and PhD Programme

Masters and PhD Programme

- Jointly organised by IIGH with UKM, other local and foreign universities
- Area of focus
  - Health Policy
  - Global Health
- Candidates co-supervised by IIGH Fellows and Academic Staff from UKM, Other Local and Foreign universities
- Degrees awarded by UKM or other partner universities

Current Collaborations

Capacity Building in Control of HIV/AIDS

- Consultative Meeting of Economics of HIV/AIDS in Asia and The Pacific
  - 7th to 9th December 2006
- Partners
  - UNAIDS
  - Asia Development Bank
  - Asia Pacific Commission on HIV/AIDS
- UNU-IIGH offered to be the Hub for Capacity Building in Control of HIV/AIDS
  - Follow-up with UNAIDS and ADB

Capacity Building

- Nepal
  - Partners
    - WHO SEARO
    - MOH Nepal
    - BP KOIRALA Institute for Health Sciences
  - Technical Assistance to Support BPK-IHS School of Public Health
    - Masters of Public Health Programme
      - Health Management
      - Health Economics
      - Research Methodology

Capacity Building

- Yemen
  - Partners
    - University of Science and Technology Yemen
    - Ministry of Health Yemen
  - Support to run Advance Courses in Hospital Management and Health Economics at MPH Level
  - Financial Support
    - University of Science and Technology Yemen
    - WHO-EMRO
    - MOH Yemen

Case-Mix System in Mongolia

- Technical Support to Implement Case-Mix System in Mongolia
  - Train National Case-mix Steering Committee
  - Conduct Training Workshops in three pilot hospitals
  - Supervise and Monitor Implementation of Case-Mix System
  - Support implementation of provider payment mechanisms
- Two year project
- Financial Support
  - MOH
  - Asia Development

Case-Mix System in Indonesia

- To provide technical support to implement case-mix system in 15 Provincial Hospitals in Indonesia
- Activities
  - Training workshops
  - Development of National Tariffs for health insurance
- National Lauching in July 2007
  - Bali Indonesia
  - 800 public hospitals

Development of “Case-Mix On-line”

- On-line training programme to improve capacity in implementing case-mix system in developing countries
- Support Case-Mix and Clinical Coding Training Centre in UKM
- Potential Partners
  - Training materials by HUKM Case-mix Unit
  - IT support from UNU-Institute Software Development
  - 3M HIS for Coding Tools

Chair in Case-Mix System

- Annual lecture on Case-Mix System by distinguished researchers
- Grant from
  - 3M-THIS
- 3M UNU-IIGH Chair in Case-Mix System
- Need to finalise the negotiations

Conferences

- National Colloquium in Public Health
  - (August 2007)
  - Partners
    - MOH
    - Department of Community Health UKM
    - Public Health Specialist Associations of Malaysia
  - Involvement
    - Co-organiser
    - Organising Committee
    - Plenary Speaker

Second Regional Conference on Global Health

- Launching of UNU-IIGH
- Proposed Date: August 2006
- Venue: Hospital UKM
- Jointly organised by UKM/MOHE and UNU
- Potential Co-organisers
  - WHO – WPRO and SEARO
  - UNDP
  - MOH
  - Academy of Medicine, Malaysia
  - Public Health Specialist Associations of Malaysia
- Theme “ Multi-sectoral Approach in Global Health”

Second Regional Conference on Global Health

- Plenary Papers
  - Health Financing
  - Health Sector Reforms
  - Control of Avian Flu Epidemics
  - HIV/AIDS: Socio-economic Impact
  - Management of Health Information System
  - Obesity
- Symposium Sessions

- Free Papers

Third International Case-Mix Conference

CASE-MIX FOR SUSTAINABLE HEALTH CARE SYSTEM

Date: 6th - 7th September 2007

Venue: Berjaya Times Square Hotel & Convention Center

Invited Speakers

- Tan Sri Datuk Dr Hj Mohd Ismail Merican (Malaysia)
- Prof. Margaret A Skurka (USA)
- Dr Tewfik Bedrihan Ussur (WHO)
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- Prof. Dr Supasit Pannarunothai (Thailand)

Highlights

- Case-Mix for Sustainable Health Care System.
- Ensuring Quality Information for Case-Mix System.
- Recent Development in International Family of Disease Classification.
- Case-Mix and Development of National Health Care Tariffs.
- Fairness in Health Care Financing Through Case-Mix.
- Capacity Building for Implementation of Case-Mix System.
- Use of ICT in Coding.
- Implementation of Case-Mix in Indonesia Is Coding A Major Issue?
- Case-Mix Facilitate Cost Effective Care.
- Ensuring Quality Coding: Experience of MOH Malaysia.
- Equity in Health Financing Through Case-Mix.
- Financing Health Care for The Poor.
- Provider Payment Mechanisms: Role of Case-Mix.
- Planning For The Implementation of Case-Mix In Developing Countries.

Registration Fee

Participant status	Before 31/8/07	After 31/8/07
Students & Paramedics	RM 350	RM 300
Medical Officers, Specialists, Managers & Professionals (government)	RM 300	RM 350
Medical Officers, Specialists, Managers & Professionals (private)	RM 350	RM 400
Overseas Participant	USD 300	USD 350

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Conclusion

- Globalisation offers both opportunities and threats in public health
- Health care is a special agenda
  - Should be given special attention
  - Should be protected from the flaws of globalisation
- Major economic and health impacts due to SARS, Avian Flu and Tsunami Disaster
- Urgent need to increase capacity in developing countries
  - Overcome detrimental effects of
  - Take advantage of positive impacts of globalisation
- Role of UNU-IIGH in research, capacity building and as reference centre in Global Health

Thank You