# The 26<sup>th</sup> Asian Parliamentarians' Meeting on Population and Development

Population and Adaptation to Climate Change

25-26 April 2010 Vientiane, Lao PDR

The Asian Population and Development Association (APDA)

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## The 26<sup>th</sup> Asian Parliamentarians' Meeting on Population and Development Population and Adaptation to Climate Change

#### 25-26 April 2010 Vientiane, Lao PDR

Organized by: The Asian Population and Development Association (APDA)

Hosted by: The Lao Association of Parliamentarians on Population and Development (LAPPD)

Supported by: The National Assembly of the Lao PDR United Nations Population Fund (UNFPA) International Planned Parenthood Federation (IPPF) Asian Forum of Parliamentarians on Population and Development (AFPPD) Joint Programme of Support to an Effective Lao National Assembly (SELNA)

#### Saturday, 24 April 2010

17:00-20:00 Registration

Day 1 Sunday, 25 April 2010 (Venue: Lao Plaza Hotel Grand Ballroom)

09:00 OPENING CEREMONY

Address of the Organizer Hon. Yasuo Fukuda MP (Japan) APDA/AFPPD/JPFP Chair

Address of Host Organization Hon. Douangdy Outhachak MP (Lao PDR) LAPPD President

<u>Address</u> **Mr. Najib Assifi (UNFPA APRO)** Deputy Director of UNFPA Asia and Pacific Regional Office

#### Address

Ms. Mieko Yabuta (UNFPA Lao PDR) UN Resident Coordinator a.i./UNFPA Country Representative in Lao PDR

#### **Address**

#### Dr. Anna Klinken Whelan (IPPF-ESEAOR)

Regional Director of IPPF East & South East Asia and Oceania Region

#### **Opening Address**

**H.E. Thongsing Thammavong (Lao PDR)** President of the National Assembly

10:00 Group Photo

#### 10:15 **KEYNOTE SPEECH**

#### H.E. Khempheng Pholsena (Lao PDR)

Minister of Water Resources and Environment Administration under the Prime Minister's Office

#### 10:45 Coffee Break

#### 11:00 Session 1:

<u>Climate Change and Women: 15 Years from the Beijing Platform of Action and</u> <u>Women's Empowerment for Adaptation Means to Climate Change</u>

#### Ms. Roohi Metcalfe (UNDP RCB)

Gender and Governance Specialist at UNDP Regional Centre in Bangkok

#### Hon. Dr. Ho Thi Thu Hang MP (Vietnam)

12:00 **Discussion** Chair: **Hon. Dr. Surya Chandra Surapaty MPH, PhD MP (Indonesia)** 

#### 13:00 Lunch Reception Hosted by APDA

#### 14:15 Session 2:

<u>Linking the Responses to Population Issues with Adaptation Strategies to</u> <u>Climate Change</u>

Climate Change Adaptation Strategies and Population Policies: Finding the Best Links for Sustainable Development **Dr. Adrian C. Hayes** Research Associate at the Australian Demographic and Social Research Institute The Australian National University

Hon. Dr. Pinit Kullavanijaya MP (Thailand) AFPPD Secretary-General

#### 15:15 Discussion

Chair: Hon. Yukio Ubukata MP (Japan) JPFP Director

- 16:15 Coffee Break
- 16:30 Drafting Committee Meeting in preparation for the Asian Parliamentarians' Statement Chair: Hon. Dr. Koukeo Akhamontry MP (Lao PDR) Vice-Chair of the Foreign Affairs Committee

16:15 AFPPD Executive Committee

-

Meeting (Members Only)

18:30

#### Day 2 Monday, 26 April 2010

19:00

21:30

(Venue: Lao Plaza Hotel Grand Ballroom)

#### 09:00 Session 3: <u>Adaptation to Climate Change for Smallholder Farmers</u>

How Farmers can Participate in Reducing the Impacts of Climate Change **Prof. Dr. Vo Tong Xuan (Vietnam)** Professor of Agronomy, Rector Emeritus Angiang University, Longxuyen City, Vietnam

Dinner Reception Hosted by the National Assembly of the Lao PDR

#### 09:30 Discussion Chair: Hon. Prof. P.J. Kurien MP (India)

10:15 Coffee Break

#### 10:45 Session 4: <u>PANEL DISCUSSION; Concrete Measures to Combat Climate Change</u>

Panellists:

Hon. Dr. Ty Phommasack MP (Lao PDR) Vice-Minister of Agriculture and Forestry

Hon. Dr. Nguyen Van Tien MP (Vietnam) Vice-Chair and Secretary-General of VAPPD

#### Hon. Song Fatang MP (China) Vice-Chair of ESCPH

Hon. Dr. Rajendra Prasad MP (New Zealand)

#### 11:50 Discussion

Chair: Hon. Dr. Tan Seng Giaw MP (Malaysia)

#### 13:00 Lunch Reception Hosted by AFPPD

#### 14:15 Session 5:

Discussion for the Adoption of the <u>Asian Parliamentary Statement on Population</u> and Adaptation to Climate Change

Chair: Hon. Prof. Dr. Boungnong Boupha MP (Lao PDR)

- 16:00 **26<sup>th</sup> APDA Meeting Evaluation Form**
- 16:05 Coffee Break and formatting of the Asian Parliamentary Statement
- 16:50 Adoption of the <u>Asian Parliamentary Statement on Population and Adaptation to</u> <u>Climate Change</u>
- 17:00 CLOSING CEREMONY

#### <u>Address</u>

Hon. Prof. Dr. Pinit Kullavanijaya MP (Thailand) AFPPD Secretary-General

#### **Address**

Hon. Chieko Nohno MP (Japan) JPFP Secretary-General

#### **Closing Address**

H.E. Pany Yathotou (Lao PDR) Vice-President of the National Assembly

- 17:30 End of Day 2
- 17:30 Press Conference
- 18:30
- Dinner Reception Hosted by APDA
- 20:00

## **OPENING CEREMONY**

### OPENING CEREMONY Address of the Organizer Hon. Yasuo Fukuda

Member of the House of Representatives, Japan; Former Prime Minister of Japan; Chair, Asian Population and Development Association (APDA); Chair, Japanese Parliamentarians Federation for Population (JPFP); Chair, Asian Forum of Parliamentarians on Population and Development (AFPPD)

#### 1. Introduction

Thank you very much for your participation in the 26<sup>th</sup> Asian Parliamentarians' Meeting on Population and Development.

This is a special year for the Lao People's Democratic Republic, as you commemorate the 450<sup>th</sup> anniversary of relocating the capital to Vientiane.

I am truly happy that we are part of this historic event, especially since the Lao Association of Parliamentarians on Population and Development (LAPPD) invited APDA to host its annual meeting in Vientiane, as part of the commemorative events to mark this special occasion. I wish to take this opportunity to express my sincere gratitude to the National Assembly and LAPPD for their generous efforts in helping to organize this meeting.

I also have some happy news to share with you. AFPPD will be receiving this year's United Nations Population Award for your work in the fields of population and sustainable development, and for legislation that you have enacted in your countries. At the same time, Bill and Melinda Gates will also be receiving the award for their contribution as individuals.

This is the first award that has been given to a regional parliamentarians association anywhere in the world. The award recognises your contributions in policy areas; in other words, it means that AFPPD activities have received international recognition. The award recognises your personal efforts in each of your countries, supported by national secretariats of AFPPD member countries and your AFPPD Secretariat.

I would like to express my sincere admiration and gratitude for your efforts, and also to the pioneers who have built AFPPD to make it what it is today. I know each of us will keep working hard together to enable AFPPD to continue to contribute in the fields of population and sustainable development, and be the driving force in realising the sustainable development of our planet.

#### 2. Issues of population,

and parliamentarian activities I would like to briefly touch upon the origin of parliamentarians' activities on population and development. And then share my thoughts with you on the theme of our meeting.

First, I would like to tell you how and why we parliamentarians became involved in trying to resolve population and sustainable development issues.

The experience Japan has gained from historical events has served as a basis for moving forward. After its crushing defeat in the Second World War, Japan rose from the ashes and achieved successful economic reconstruction. During this process, it was recognised that improving rural life was an urgent necessity, and so the "New Life Movement" was introduced. This movement contributed significantly to improving the status of women, which led to a rapid decline in the birth rate and resolved the situation as the Japanese proverb goes: "The rich get richer, and the poor beget – children".

Interestingly, Japan was the first non-Western country to achieve demographic transition. Japan's experiences paved the way for a significant turning point that enabled population policies to be widely implemented around the world.

In 1973, on the eve of the establishment of JPFP, members of the Japanese parliamentarians group went on a study tour of Asian countries. It came as a great shock when they saw that there were innocent children born, literally, on the street and dying there of hunger.

At that time, the world's population growth rate was quite high and the increase in population would come to be a major cause of extreme poverty everywhere. Having seen the dire circumstances in other Asian countries for themselves, the Japanese Members of Parliament adopted a principle to guide their activities on population: "No child should be born only to die of hunger".

For the population to stabilise, it is essential that a spontaneous decrease in the birth rate occurs, as a consequence of each person understanding the importance of population issues and that personally addressing them leads to their happiness.

Population issues can never be forced. As representatives of our people, and as legislators, we have important roles to play in ensuring a legal environment for addressing the population problem; reflecting their voices in policy-making, and at the same time, communicating the principles involved to them. In order to support developing countries in resolving their population issues, we felt we should share our own experiences, as fellow parliamentarians. And so in 1974 we established the world's first supra-partisan parliamentarians' group on population, JPFP (the Japan Parliamentarians Federation for Population).

#### 3. Building global networks

this perspective, From to solve population issues in developing regions, we worked in partnership with like-minded parliamentarians from India, China, Malaysia, and Thailand; and at a meeting in Beijing in 1981, decided to establish the Asian Forum of Parliamentarians on Population and Development (AFPPD), and the Asian Population and Development Association (APDA) as its incorporated parent foundation.

In 1982, the Global Committee of Parliamentarians on Population and Development (GCPPD) was established as a platform for regional parliamentarian activities. Then regional parliamentarians' fora on population and development were established in the Americas, in Africa and the Arab region, and in Europe.

At present, there are parliamentarians' fora in every region of the world, which play vital roles as regional platforms for parliamentarian activities related to population and development.

## 4. Ever-more complex contemporary issues and population issues

As we consider the future of humankind with the population continuing to grow, there are other pressing issues such as shortage of fresh water resources, food security, and the environment that must be addressed.

There are earnest discussions in progress around the world but many pertain to the mitigation of the environmental load and the carbon market, as in emissions trading. We must now ensure that such discussions make reference to- and deal with the population, which is the main actor on Earth.

Population, affluence and technology combined impact the environment. Sustainable development, therefore, cannot be realised without population stabilisation. Although this is an established fact, one can hardly say that the dynamics of population are sufficiently taken into consideration in dealing with the problems of climate change.

Environmental problems do not know any national boundaries. It is imperative that we integrate population issues and adaptation to climate change as we think about our future and the impact climate change could have on disadvantaged and vulnerable people around the world.

In order for that to happen – in addition to the important microscopic perspective of ensuring "Universal Access to Reproductive Health" – it is essential to have a macroscopic perspective that enables us to find ways to promote sustainable development in a finite planetary ecosystem.

It is particularly vital that the disadvantaged be given improved knowledge and technology so that they develop adaptive competence to deal with climate change by utilising local wisdom and resources.

This initiative requires urgent implementation. And in order to realise it, we must position population issues in the context of sustainable development, and mobilise all our resources; our wisdom; technology; and funds, to build a society in which people can live with dignity.

From this perspective we chose the theme of our meeting: "Population and

Adaptation to Climate Change".

- 5. <u>Population and adaptation to</u> <u>climate change</u>
- 1) Population and the environment of the Lao PDR

Our host country, the Lao People's Democratic Republic, is located at the centre of the Indochinese peninsula and is a beautiful and lush green country.

We know that in the past the Lao people moved about through the vast region, and tilled their land using the slash and burn method.

Back when the Lao population was relatively small, slash and burn cultivation was less harmful to the environment. With the population increase, this method was practiced more and more, which – from what I learn – has resulted in soil erosion and environmental destruction.

The birth rate in the Lao PDR still remains high. The population which was 1.66 million in 1950, grew to 5.4 million by 2000, and is now estimated to exceed 10 million by 2050. The population increase will change Lao society, including agricultural production methods. Therefore, appropriate measures on population issues are essential to protect the Lao PDR's natural environment.

2) Population and adaptation to climate change

As previously mentioned, to stabilise the population, it is essential to disseminate reproductive health services – including family planning – as well as empowering women, raising their literacy level, and improving their health and the health of their children. These improvements will be the basis for people to adapt and manage disasters and unstable food production due to climate change. For people to successfully adapt to climate change, there is still more to do. In addition to better health and greater adaptive capacities, it is important to implement community development, particularly in increasing self-sufficient food supplies from local smallholder farmers.

By simultaneously combining an improved personal living environment and strengthening the adaptive capacity of communities, we can also increase the general adaptive capacity and build resilience to climate change, which will help to build a concrete roadmap towards population stabilisation for sustainable development.

This is precisely the initiative on population and sustainable development that we have established from the very beginning. Since then, we have been actively discussing it, enacting necessary laws and working hard for its achievement. As elected representatives of our peoples, let us appeal to our governments and the international community to recognise the importance of working towards the stabilisation of population and community development so that we may successfully see climate stabilisation and realise sustainable development.

Let us work strongly together to realise our wish as parliamentarians to build a world in which every child born will have a full and dignified life.

I am confident as the organizer of this event that we will conduct fruitful discussions over the next two days, making a great contribution to our future.

I thank you so much for your persistent dedication.

## OPENING CEREMONY Address of the Host Organization Hon. Douangdy Outhachak

MP, Lao People's Democratic Republic;

President of the Lao Association of Parliamentarians on Population and Development

(LAPPD)

It is a great pleasure and honour to co-host the 26<sup>th</sup> Asian Parliamentarians' Meeting on Population and Development. I note that the main contents of this meeting are meaningful and are adequate to the regional and international need.

As you may be aware, Lao PDR is the only one country in the Southeast Asia region having no access to the sea, but having borders with many countries such as: the People's Republic of China to the north, the Kingdom of Cambodia to the south, the Kingdom of Thailand to the south, the Kingdom of Thailand to the west, the Union of Myanmar to the northeast, and the Socialist Republic of Vietnam to the east. The administrative system of the Lao PDR consists of one capital and 16 provinces, 141 districts, and has a population of 5.6 million.

Its population's status and characteristics are considered as adolescent which is shown within the age structure in 2010 as: the percentage of the population between 0-14 years old is approximately 38%; 15-64 years old approximately 59%; and 65 years old and above is approximately 4%. Therefore, the ratio of the dependent population is approximately 42%. Every year, the population increases by approximately 153,000 people.

Lao PDR has translated the abovementioned declarations and statements into policies, programmes and projects; including the Cairo Declaration of the International Conference on Population and Development (ICPD) in 1994, the Addis Ababa Statement of Commitment of the International Parliamentarians Conference on the Implementation of the ICPD Programme of Action in 2009, and the Statement of the 25<sup>th</sup> Asian Parliamentarians' Meeting on Population and Development last year. It is with the aim of implementing the eight Millennium Development Goals (MDGs), National Growth and Poverty Eradication Strategy (NGPES) and the education reform programme; improving population health conditions, reducing maternal and infant mortality, promoting spacing between births, and carrying out other projects.

The National Assembly has considered and adopted laws related to population and development – particularly a law on the protection of women; a law on hygiene, disease prevention and health promotion; a law on food; a law on treatment, and so on. In addition to that, the National Assembly also authorised the establishment of the Lao Association of Parliamentarians on Population and Development (LAPPD) as a headquarters to help the legislative body in considering, taking part in- and overseeing population and development issues.

After LAPPD was established, in the past, our Association has coordinated and cooperated with relevant bodies – both domestic and international – to implement the projects of population and development and to share lessons learned and experiences; particularly with the National Coordinating Committee on Population and Development, the United Nations Population Fund (UNFPA), the United Nations Development

Programme (UNDP), the Asian Forum of Parliamentarians on Population and Development (AFPPD), and others.

LAPPD published а manual on population and development activities intended for distributing to the National Assembly members, mostly for those affiliated to the Association. It is also for promoting population and development activities, and for disseminating to those who do not have the right to vote in several provinces.

LAPPD coordinated with the concerned parties for disseminating basic knowledge on population and development, maternal and child health, reproductive health, vaccinations, nutrition, family planning, HIV/AIDS and STD prevention for local administrative authorities and people in remote areas in the poor districts of the northern and southern provinces of Lao.

LAPPD also takes part in the following:

- Considering and adopting legislations and budgets for population and development
- Carrying out oversight on population and development
- Participating in international population and development conferences for parliamentarians

The progress that has been made up to today is through the implementation of the policies, programmes, projects and laws relating to population and development, which will continue. For instance, poverty was reduced from 33.4% in 2002-2003 to 27% in 2007-2008. It is projected that it will be reduced even further to 24%-25% in 2009-2010.

The maternal mortality rate of 405 per 100,000 live births in 2005 was reduced to 300 per 100,000 live births in 2010. The mortality rate of children aged below 5 years reduced from 98/1,000 to 75/1,000; the HIV

prevalence rate remains low; school enrolment rate remained 89.2% in 2007-2008 and it reached 91.6% in 2008-2009; the literacy rate of people aged above 15 years is 86%; and gender equality is implemented widely.

The abovementioned achievements are gained due to efforts made by the Lao people of all ethnic groups under guidelines of the Government, National Assembly, and the support and assistance of friendly countries and International Organizations. On behalf of LAPPD, I express sincere thanks for that.

Even though progress has been made, Lao PDR is currently ranked 130<sup>th</sup> out of 177 countries in terms of development. The country actively paid attention to development 10 years ago; therefore, there are some strains and challenges in the population and development field.

- The maternal and infant mortality rate remains high (300/100,000 and 75/1,000) due to many reasons. The main reason is an insufficient number of skilled midwives and birth attendants even though there are many hospitals and dispensaries – 818 dispensaries are responsible for 8,812 villages. The birth spacing and family planning programme is not implemented widely because of the customs and traditions of some tribes.
- The poverty of population decreased from 33.4% in 2002-2003 to 24%-25% in 2009-2010 – it is high. Lao PDR experienced floods and typhoon Ketsana in the southern provinces and drought in some areas. This is a cause of poverty.
- 3. Malnutrition still remains among 30% of children aged below 5 years due to poverty, lack of nutrition-related knowledge and inadequate health information. Other reasons are customs, traditions, and the habits of some people.

4. Even though the HIV prevalence rate remains low, there are many risks since Lao PDR is surrounded by some countries with high prevalence rates and there is labour migration.

In order to continue implementing strategies to achieve the eight Millennium Development Goals, particularly 4, 5 and 6; the Declaration of the International Conference on Population and Development in 1994 in Cairo, Egypt; and other statements of parliamentarians' conferences on population and development, LAPPD emphasises the following:

- Coordinate with government organizations to amend and draft legislations relating to population and development; particularly antiviolence laws against women, law on alcohol control, law on HIV/AIDS prevention, and so on.
- Continue coordinating with relevant parties to consider and adopt a budget for population and development activities, expand medical networks, facilitate easy access to

health services and provide health information widely.

- 3. Oversee, promote and take part in disseminating population and development issues widely through different means.
- 4. Increase cooperation with parliaments of friendly countries, international organizations in order to share lessons, experience and information and attract assistance.

I do hope that the conference will provide parliamentarians and delegates as representatives of friendly countries and international organizations with an opportunity to share constructive comments. Lao PDR will continue implementing her own commitments and is shoulder-to-shoulder with you to further push population and development issues forward.

Finally, I would like to express my sincere thanks to your Excellencies for attending this meeting and wish you all good health and great success in your own activities.

Thank you.

### **OPENING CEREMONY**

**Address** 

#### Mr. Najib Assifi

Deputy Director of the Asia and Pacific Regional Office (APRO), United Nations Population Fund (UNFPA)

On behalf of the United Nations Population Fund, or UNFPA, please allow me to welcome all of you to this very important 26<sup>th</sup> Asian Parliamentarians' Meeting on Population and Development. UNFPA, whom I represent today, has long been associated with APDA and its activities in this region. UNFPA is, once again, extremely delighted to be one of the partners that are supporting this event in 2010.

For us in UNFPA, our work with parliamentarians is very important. In fact, around the world and also in this region, we could site many excellent examples of the parliamentarians' efforts to address the pertinent issues of population and development at the highest policy level, as well as advocacy and awareness-raising among constituents. I would like to congratulate all the parliamentarian champions who have been working so tirelessly on issues of population and development.

The two main routes of collaboration between UNFPA and parliamentarians are to first promote resource mobilisation and resource allocation at the national and international levels for achieving the ICPD and MDG goals; and second, to create an enabling environment at the national level for enacting, improving and monitoring laws, policies and programmes that contribute towards ICPD and MDG goals.

The theme of this meeting is on population and adaptation to climate change, a topic not only of current relevance, but more importantly, a subject matter that has significant importance for global citizens and especially for us here in the Asia-Pacific region. This is because we are indeed entering a warming world, which if unchecked can have disastrous consequences for the planet. Fortunately for us, there is general agreement that we can collectively act to stop the warming before its impact can become irreversible or intolerable.

There is also increasing consensus that while population has been largely forgotten in climate change negotiations, population is indeed critical, both in understanding climate change and its consequences; therefore, it must be an important factor in any comprehensive global plan to address climate change.

The relationship between population and climate change is, understandably, very complex but as the evidence is growing I am sure that this connection between population and climate change will be exhaustively covered over the coming days in what will pre-empt much discussion on the subject.

Nevertheless, the following are some issues that you may want to consider in your deliberations over the next two days.

First it is important to recognise that growing emissions of greenhouse gasses resulted from unsustainable patterns of production, transportation and consumption, rapid growth of population in the last century, multiplied the negative impact of these patterns on climate change. In other words, climate change is aggravated by population growth and size, and consumption patterns of the population. The projected doubling of the global urban population within the generation, mostly in the developing world – and much of it in Asia – if unchecked, can be a bigger source of emissions in the world.

Cities are also highly vulnerable to natural crises and disasters. Low-lying and coastal areas can be potentially affected by sea level rising resulting from climate change, leading to catastrophic and emergency situations.

Many agree that the biggest single impact of climate change will be on human migration, following displacement by severe coastal weather events, shoreline erosion, coastal flooding and agriculture disruption. In these circumstances, migration is a vital adaptation strategy to increase people's resilience to climate change.

Investments in education, health, sexual and reproductive health, and youth can result in lower fertility, slower population growth, women's empowerment – all of which can contribute towards climate change mitigation and adaptation.

Adaptation needs must be identified and assessed and adequate adaptation measures must be prioritised and planned on the basis of scientific information and analytical tools, including analysis of population trends, population distribution and organization using demographic data, desegregated by sex, age, and local vulnerabilities.

Adaptation planning should give priority to the most vulnerable communities and groups, such as women – particularly pregnant women - children, the disabled and indigenous populations. National capacities for long-term target planning and contingency planning for vulnerable areas in population as well as proactive urban planning for anticipated growth of vulnerable population should be developed.

Let me conclude by wishing you all a productive workshop. Your discussions and deliberations will certainly contribute toward a better understanding within the region of the interrelationship between population and climate change and how population can help in adaptation strategies.

I look forward to reading the Asian Parliamentarians' Statement on Population and Adaptation to Climate Change, which will be a concrete outcome of this workshop.

I wish you a very successful meeting.

Thank you very much.

#### **OPENING CEREMONY**

**Address** 

#### Ms. Mieko Yabuta

Country Representative in the Lao People's Democratic Republic, United Nations Population Fund (UNFPA)

Let me start by warmly congratulating the Lao Association of Parliamentarians on Population and Development for hosting the 26<sup>th</sup> Asian Parliamentarians' Meeting on Population and Development in Lao PDR.

Having this meeting here in Vientiane is, again, another indicator of the commemorable and growing regional leadership of Lao PDR.

It is also my pleasure to welcome Members of Parliaments from other countries.

Representing the United Nations family in the Lao PDR, allow me to emphasise the importance of the role of parliamentarians in shaping the vision and creating forward-looking policies in the country and in the international community.

Responding to the needs of people and laying the foundation for sustainable development is a key responsibility of parliamentarians and your leadership in finding common ground to the question at hand in this meeting, namely, "Population and Adaptation to Climate Change", is crucial.

As we, the United Nations family in the Lao PDR, understand and appreciate the role of the National Assembly in achieving sustainable growth and development, we are jointly working under the framework of the so-called "SELNA Programme", Support to an Effective Lao National Assembly. This programme, bringing together development partners and six UN agencies, was introduced to help strengthen the capacities of the Members of the National Assembly and to enhance legislative oversight and representational capacities. The Lao Association of Parliamentarians on Population and Development has been contributing to the capacity development of their fellow parliamentarians through awareness- raising and advocacy of population and development issues.

Hosting this event is another important opportunity for such advocacy, to keep this prominent global issue on the agenda in the Lao PDR, as well as in the region. And to take actions to mitigate its negative impact on current and future population, especially the vulnerable population who are affected disproportionately.

Let me reaffirm the United Nations Country Team's commitment to continue working together to further provide support to integrate population and climate change issues in the work of the National Assembly in Lao PDR.

Finally, I would like to take this opportunity to congratulate the Asian Forum of Parliamentarians on Population and Development for being given the United Nations Population Award. Your work on informing, motivating, and involving parliamentarians in population issues and programmes, ranging from reproductive health, maternal health and family planning, gender equality, to the aging of the population and climate change is truly outstanding and worthy of the UN Population Award.

I wish you a very fruitful meeting and I hope you will enjoy your stay in this beautiful country.

Thank you for your attention.

#### **OPENING CEREMONY**

**Address** 

#### Dr. Anna Klinken Whelan

Regional Director of the East and South East Asia and Oceania Region International Planned Parenthood Federation (IPPF)

#### Sabaidee.

I am very honoured to be invited to speak to this important meeting of parliamentarians, who have the chance to make a difference in your own countries and also other countries in the region. This is my first APDA Meeting, although you well know my predecessor, Datuk Dr. Raj Karim and also IPPF's Director General, Dr. Gill Greer who have spoken at your meetings in the past.

IPPF along with UNFPA has been a long supporter of APDA for many years because we believe that parliamentarians are vital advocates for sexual and reproductive health and rights, particularly at times of challenge. Now is such a time of challenge and we need your voices and support more than ever.

Since this is my first APDA Meeting, I feel I must declare that I am proud to be child of this region. I was born in Singapore long enough ago that it was still part of Malaya, with a grandmother who was born in Shanghai. Her father had two wives; one wife was Japanese and she returned to Japan during a crisis period with her sons, but left the daughters with the other wife. My grandmother's family moved to Malaya in the early 1900's, where my mother was born in 1930. She married a Danish man and we lived in Singapore, Thailand and Japan in my early years before migrating to Australia in the late 60s. My links with Japan became even stronger when my father died there in 1983. I have since worked in most countries in this region over the years as an academic or consultant.

My return to Kuala Lumpur is what they say in Malaysia, *Balik Kampung*, which means that I am returning to my roots.

Thus, I just wanted to introduce myself and give you a little bit of my history because you will be seeing me many more times, I am sure.

I was searching the web for a map of the Asia Pacific region and it produced many versions – and I am sure it has been a debated topic over many centuries as boundaries and borders have changed. But we are all children of this region which is the most populous and diverse – from the largest populations to some of the smallest in Pacific Island countries and also the newest in Timor-Leste.

Whatever the debates around the precise scientific predictions of climate change, this is a region which has already experienced severe climatic and geological events such as droughts, floods and typhoons, earthquakes and tsunamis.

Deep below our countries in this region we face geological instability that we cannot do much about. We live in the Ring of Fire, surrounded by many trenches that can cause all sorts of instability, but we can do something about climate change.

Climate change has been shown to predict that there will be warmer temperatures which will affect rainfall patterns, cause snow and ice to melt and affect the intensity of extreme weather events such as storms and heat waves, and events such as flooding and drought we are currently experiencing some in our region.

All of these impacts are expected to become more severe in future. As a result, some areas could become more fertile – it is not all bad news. Other areas could become more barren leading possibly to regional food shortages, as well as also mass migration to less barren areas and increasing poverty as livelihood opportunities are lost. Malnutrition is also expected to increase in developing countries.

Indicators have been developed to show that some countries will be more resilient to the effects of climate change - some of those countries are in our region. However, even in those countries, the poor are the most effects vulnerable to the of environmental degradation and climate change. In all the countries that you represent here today, you best know how poverty forces people to adapt their behaviours and lifestyles as natural resources are depleted - in order to survive.

Climate change is not only driving migration, it is also increasing poverty and gender inequality, and compromising health. And those who are poor have contributed the least to over-consumption are often the most affected.

The ability of women to control their own fertility and realise their sexual and reproductive health and rights are fundamental to- and inseparable from efforts to promote better health, gender equity, economic and political opportunity, and sustainable growth – all of which will better equip countries and communities to cope with- and respond to the challenges posed by climate change. Better sexual and reproductive health and rights will support resilience – of women and communities – to the impacts and effects of climate change. If we join the dots, over-consumption – which is consumption per capita that is higher in some countries than in others – over production and population, leads to climate destabilisation, natural resource depletion and environmental degradation.

But the good news is that we know how to encourage slower population growth. There are three clear interventions that have been clearly linked to lower birth rates in many countries. These include expanding education, especially for the world's girls; enhancing economic opportunities for women; and providing access to voluntary reproductive health and family planning services, so that women and men can freely decide the number and timing of their children.

IPPF does believe that meeting un-met needs for population, family planning and reproductive health will bring huge health benefits, and – in helping lower rapid population growth – contribute to lessening the impact of climate change. Meeting unmet needs for family planning will enable women and communities to become more resilient to the impacts of climate change, but of course that is not the only answer.

IPPF is the second largest NGO in the world and we work in countries through locally based member associations that are closely linked to the needs and problems of their communities and local populations. The Regional Office, based in Kuala Lumpur, works hard to develop capacity in local associations, so that they can better address the needs of vulnerable, the poorest and most marginalised.

In fact, over the last few days, we have been working with the Lao Project Office and we visited Ladharn Health Centre, which is three hours up the river from Luang Prabang. There we saw major changes which have taken place to the lives of women and the villagers – their lives have definitely improved. Our Lao Project Office will become a registered non-government organization in Lao very soon.

IPPF and our member associations can promote, call and advocate for the integration and inclusion of population and sexual and reproductive health and rights issues within national development frameworks, poverty reduction strategies and National Adaptation Programmes of Action (NAPAs). IPPF can, in its advocacy, highlight that reducing unmet need for family planning will support the resilience of women, families and communities.

IPPF commits. But we also need your support and advocacy. As the new

Regional Director, I feel that I can be open with you to share that IPPF top donors include three from our region – Australia, Japan, New Zealand – but with the global financial crisis several countries are facing, many are reducing their contributions to core funding to IPPF, which limits our ability to work with member associations in our countries.

The case for population and development and the relationship to climate change and environmental degradation is strong. It will take a united and genuine effort on all our parts to help change thinking that we can continue business as usual.

We must all commit.

Khop chai.

## OPENING CEREMONY Opening Address H.E. Thongsing Thammavong

President of the National Assembly, Lao People's Democratic Republic

On behalf of the National Assembly of Lao People's Democratic Republic, I would like to take this meaningful occasion to express a welcome to the heads of delegations, parliamentarians and honourable delegates participating in this meeting.

It is a great pleasure that APDA has given the honour and confidence to the Lao PDR to host the 26<sup>th</sup> Asian Parliamentarians' Meeting on Population and Development.

This kind of meeting is being held for the first time in Lao PDR. I consider that this meeting is an important historical event and has significant meaning for Lao PDR and particularly to the National Assembly of the Lao PDR. It is a symbol of solidarity, friendship and cooperation between the nations in the Asian region pertaining to the activities on population and development.

Since the 25<sup>th</sup> Asian Parliamentarians' Meeting on Population and Development held in Jakarta, Indonesia, the world situation – as well as our Asian region – has sophistically changed bringing opportunities, difficulties and challenges. Firstly, the financial crisis, the economic recession, the issue of renewable energy, food security, climate change, natural disasters, epidemiology, poverty, political conflict and others. All of these are direct threats to the development and security of humanity, particularly to women and children.

With gaps in development within each country in our region – such as between districts and rural areas – the population in our region is still facing poverty and many challenges in its development, making it hard to implement achievement strategies of the eight Millennium Development Goals (MDGs).

Among member countries, most of the populations are living in the rural areas with a lag in agriculture. They do not have enough opportunities to get access to education, or health services and these are considered important bases for the development for moving forward towards a new and better life. On other hand, it is due to the traditions and customs, the faith and the lack of budget which are consequent causes of slow development.

In the new condition of the integration of countries into the Southeast Asia region under the market economy mechanism, there are not only positive impacts but also negative ones such as: trans-national crime, narco-trafficking, human trafficking – all of which make women and children the most vulnerable targets.

Therefore, since parliament is the legislative body representing the rights and interests of people for protecting and promoting rights and interests of these people, drafting legislations and laws that are relevant to the reality and strengthening of capacity on the monitoring and oversight of the implementation of laws, sustainable socio-economic development is the main duty of the legislative body. Parliament must also make efforts in active collaboration in which parliamentarians' participation will be very meaningful.

As mentioned above, I note that the cooperation between countries in our Asian region is very significant – especially the sharing of experiences and effectiveness of cooperation and helping each other in order to contribute to the implementation of socio-economic development plans of each country by bringing mutual benefits to each party; mainly by reducing the gap in terms of the development between countries and making our region peaceful, secure and prosperous.

On this outstanding occasion, I highly appreciate the active contribution of the Asian-Pacific community and do hope that we will continue our cooperation and provide more strong assistance to each other.

In the Lao PDR, the Party and State have always attached importance onand put many efforts into the development of action plans and the requirement of the International Meeting on Population and Development activity, in which the government integrated the effects of the meeting into the national population and development policies according to the eight MDGs. In order to effectively ensure the implementation of these goals. Lao PDR has also put this objective into policy and some laws, establishing mechanisms for implementation from central to local grass-roots levels with participation by all the people. This has progress and made step-by-step achieved population activities.

However, population and development activities in Lao PDR are have been facing many issues and challenges such as the plan for poverty reduction, health services for the population, especially women and children in the remote areas where there still have not been good results.

Compulsory primary education has also still had no success in some areas and ethnic groups. The increase of gender roles in the society in some areas still needs time, and attention needs to be paid to solve the problems in the future.

However, as an AFPPD member country, we will continue to do our best to effectively tackle the abovementioned challenges to be solved step-by-step.

I do hope to get cooperation and support from member countries in order to realise population and development activities in Lao PDR, in order to reach its objectives and goals as defined.

On behalf of the National Assembly, the Government and the Lao people, I would like to take this meaningful occasion to express our sincere thanks and gratitude to the Parliament, Government and people of Japan, who have given valuable assistance to our country. I would also like to thank the international organizations and our friends for their assistance.

In order to promote the role of the Asian parliamentarians for population and development, I do hope that through this meeting the delegates will share lessons learned, experiences and ideas together to issue laws, draft legislations and set out an appropriate policy in each respective country; promote the understanding and confidence with each other, and overcome all challenges that we are facing today. All of this is to contribute to the protection of peace, stability, cooperation and development in the region which will be for the mutual benefit of our people.

Finally, I wish the meeting success and wish all delegates happiness, good health and pleasant stay during your activities in Lao PDR.

On this delightful and meaningful occasion, I declare the 26<sup>th</sup> Asian Parliamentarians' Meeting Population and Development open.

Thank you.

#### KEYNOTE SPEECH

## H.E. Khempheng Pholsena

Minister of Water Resources and Environment Administration under the Prime Minister's Office, Lao People's Democratic Republic

I take this as a great privilege for being invited this morning to address this august gathering of the 26<sup>th</sup> Asian Parliamentarians' Meeting on Population and Development, with particular focus on "Population and Adaptation to Climate Change".

Let me also take this opportunity to extend a very warm welcome to all of you and thank you for taking time out of your very busy schedule to be here with us. From the perspective of a Least Developed Country (LDC) being considered as one of the most vulnerable in the region to climate change impacts, I am truly honoured to have this opportunity to share with you my views on the challenges we now face in addressing climate change while ensuring strong growth and sustainable development.

All of us here recognise that our world is changing, and that it is changing fast. More importantly, and central to this discussion, is the changing nature of our world due to climate change and that climate change is real. It is not fiction. And it threatens our lives and the lives of everyone on this planet, in particular the poor and disadvantaged are hit the hardest.

It is an undeniable fact that climate change affects the entire Earth. We have witnessed an increasing number of natural disasters around the world in the past years with developing countries being struck the hardest. As a matter of fact, Lao PDR has experienced an exponential increase of unexpected and extreme weather conditions like floods and droughts every year as reflected by the worst in the country's history of climate records – there was the August 2008 flooding and October 2009 Ketsana Typhoon in the south of Lao PDR causing devastating losses in the affected areas. According to scientific evidence this situation is predicted to worsen.

Moreover, crop yields in various Asian countries have declined and rainfall has been erratic. According to the 2007 IPCC report, one of the reasons behind the decline in rice production – one of the most important crops in many Asian countries – has been increasing water stress due to rising temperatures and the changing weather patterns. This, in turn, is scientifically linked to the concentration of greenhouse gases in the Earth's atmosphere that triggers global warming.

Climate change is drastically changing the environment in which we live. This is particularly true for the billions of people who live in the developing world and depend on rivers, land and the seas for their survival. Climate change has the very real potential to undermine all our efforts to improve the livelihoods of our people, including the attainment of the Millennium Development Goals (MDGs). It also threatens to aggravate poverty and burden marginalised and vulnerable groups particularly women and children with additional hardship.

According to the UNFPA source in Southeast Asia, for example, about 221 million people already live below the US\$2-a-day poverty line. Many of the region's poor live in coastal areas and in low-lying deltas, and many of these poor people are subsistence farmers.

Marginalised households are particularly vulnerable to climate change because their limited income provides little- or no access to health services or other safety nets to protect them against the threats from changing conditions.

Climate change is interconnected. It is a global phenomenon that affects us all. Therefore we must all act together as a global community to minimise its effects. But because the effects are different for different populations, and because the causes of climate change – such as carbon emissions – are different among countries, the responsibility to act is also different.

Thus when we talk about the UNFCCC's principle of "common but differentiated responsibilities" (CBDR) and respective capabilities, we do so based on the recognition that the largest share of global emission of greenhouse gases has originated in developed countries, that per capita emissions in developing countries are still relatively low, and that the share of global emissions originating in developing countries will grow to meet their social and development needs. Even a small emitter today may become the big emitter of tomorrow. The question then, is not whether developing countries should have a part in the fight against climate change but how, since actions must start in earnest.

Therefore, we need to move to a discussion where climate change is addressed from an adaptation, development and equity point of view rather than a single focus on reducing carbon emissions. Sustainable funding, including transfer of knowledge, skills and technology from developed nations to developing economies will be needed to put in place adaptation measures in developing countries. Only then can countries like Laos have the necessary

knowledge, tools and capacity to shoulder its share of responsibility.

Furthermore, all countries need to continue to raise awareness about the changes in our environment. People need to better understand what is happening to our world and what our global responsibility is. Climate change is affecting all of us and all of our communities need to be aware of this. Only then can we really embark on significant changes that go beyond the national level to the global community level. Meanwhile, developing countries must also assume their share of responsibility.

With the necessary technology, skills and capacity, built with support from developed countries, developing countries can be in a position where they can put in place measures that can help them develop their economies without further harming the global environment. In this way, the developing countries assume their share of responsibility more sustainably by using and developing resources in a low-carbon fashion thus reducing future adverse effects.

Of course we must also, as a global community, continue to embark on measures to mitigate the effects of climate change and, in the first place, move towards the transition to clean energy and energy efficiency to minimise greenhouse gas emissions.

May I also mention the vital role of the private sector and all stakeholders in this process. Governments cannot alone embark on climate change reforms. At the end of the day it is each of us, on a personal level, that contributes to the fight against global warming through behaviour and mindset change towards reducing our energy consumption as well as waste generation including plastic bags.

Public-Private Partnerships (PPP), for example, will be tremendously helpful.

Working hand in hand, governments, the civil society and the private sector can ensure that investments are environmentally and socially sustainable. The global community includes us all. I believe in this way, we, as responsible members of the global community, are equitably sharing the responsibility of providing a safer environment for future generations.

Climate change is not only an environmental challenge – it is also a massive economic challenge, a political challenge and one of the greatest moral challenges of our age. To take this challenge head-on, we all need to work hand in hand transcending race, religion and political boundaries of nations.

Unlike the world of nations, the world of nature knows no boundaries. This message is particularly vital this year as we move towards COP16 in Mexico for a legally binding agreement to cut greenhouse gases following the Copenhagen Accord, with which Lao PDR has associated herself.

I sincerely hope that the disagreements and differences that have emerged among the parties for a legally binding agreement will be overcome in the spirit of "common and differentiated responsibilities" and respective capabilities" by COP16. This would then ensure a legal coverage for the period after 2012 when the first commitment of the Kyoto Protocol comes to an end. I also hope that despite differing views there could be - and there should be a consensus for the financing pledged during the COP15 to be available; particularly for the group of the most vulnerable LDCs and Small Island States support capacity development to needs, the development and transfer of clean technology and the implementation of adaptation and mitigation actions particularly in the area of food security, forestry, energy efficiency, natural disaster risk management through the establishment of reliable early warning systems and climate

proofing infrastructure development, and most importantly gender equity.

I also sincerely hope that you, as Parliamentarians, will play a pivotal role in getting your respective governments to support a legally binding agreement at the upcoming COP16 in Mexico.

Climate Change is not only an issue of energy efficiency or industrial carbon emissions only, but also of population dynamics, poverty and gender equity and its impact on our daily lives. According to Earthscan the global population is increasing every hour by 10,000 people, and the impact of this growth is that, every hour 4 million tons of carbon dioxide is emitted; 1,500 hectares of forests are cut; and three species go extinct. Every Celsius degree of temperature rise above pre-industrial levels is likely to cause the extinction of approximately 10% of species.

Climate change will not only endanger lives and undermine livelihoods, but will also increase the gaps between the haves and have-nots and amplify the inequalities between women and men. There is no doubt that all strata of the society are being affected by climate change particularly women and children.

As a low carbon emitter, Lao PDR takes environmental protection very seriously. In the past few years the Lao Government has taken significant steps to ensure our natural resources are sustainably utilised and protected.

The Lao Government, in its sixth National Socio-Economic Development Plan, covering the period of 2006-2010, lays out the country's goal of developing the economy and reducing poverty. As a government and as a country, we recognise that poverty reduction and environmental protection must go hand in hand.

Given the vast natural resources that Lao PDR possesses, one of the Government's ultimate goals is to be able to sustainably develop these natural resources. This means working within the boundaries of what our environment will allow. Hence, for instance, infrastructure development must be aligned with environmental protection. While hydropower development - a key focus due to its potential to generate much-needed revenues to reduce poverty in this country - must have in place sound environmental and social safeguards, it is also crucial to work with a responsive private sector. This will allow us to maximise the low-carbon potential of hydropower while minimising the impacts to the environment.

In this way, our investment in hydropower – one of the cleanest sources of energy – has the potential to allow a poor country like Lao PDR to develop without adding an unnecessary burden to the global environment. Let us call it "environmentally and economically sustainable development of hydropower", which is: mitigating impacts to the environment due to dam construction, while driving economic growth in ways that do not adversely impact the global community.

We fully acknowledge the risks of climate change impacts, as well as the opportunities that will become available by adopting a low carbon growth strategy which would reinforce our commitment for sustainable development through mitigation and adaptation to climate change impacts to ensure steady growth and poverty reduction.

In 2008, the Government of Lao PDR, with support from the Global Environment Facility (GEF) and the United Nations Development Programme (UNDP) and through multi-stakeholder participation, formulated the National Adaptation Programme of Action (NAPA). It is designed to be a country-driven programme to address the immediate needs related to current and projected adverse effects of climate change on key sectors in the country that are agriculture, forestry, water resources and human health. At present we are working on the preparation of the Second National Communication, due for completion in 2011.

May I also take this opportunity to inform you that in response to the diverse challenges of climate change that we are facing, the Government of Lao PDR has recently approved the National Strategy on Climate Change with the vision "to secure a future where Laos is capable of mitigating and adapting to changing climatic conditions in a way that promotes sustainable economic development, reduces poverty, protects public health and safety. enhances the quality of Lao PDR's natural environment and advances the quality of life for all Lao people".

The strategy on climate change has recognised the high vulnerability of the Lao PDR to climate change, the anticipated adverse environmental and socioeconomic consequences, especially to the poor and the most vulnerable – including women and children – and also the need for strengthening the capacity to adapt to climate change and its impacts.

While on adaptation the focus will be on making the key sectors – including agriculture, water resources and forestry - more climate-resilient, enhancing knowledge and awareness on climate change, enforcing the conservation of National Protected Areas and building reliable early warning systems, as well as addressing the issues linked with population. On the other hand. mitigation will address three priorities: firstly - the sustainable management of water, land and forestry resources with emphasis on achieving the

ambitious target of 70% forest coverage of the national territory by 2020; secondly – the sustainable development of our abundant hydropower potential and other forms of renewable energy with Lao PDR being one of the few countries in the world that generates all of its electricity from hydropower, primarily a green source; and thirdly - the improvement of energy efficiency and energy saving in industry, buildings and transport. In addition, we are also strengthening our capacities to implement and promote CDM projects and to prepare for implementation of the UN-REDD+ initiative.

The National Strategy on Climate Change will be updated on a regular basis to integrate changes as a country's social and environmentally responsibility is continually changed.

May I take this opportunity to convey my thanks and appreciation to our Government, to the donor community, including bi-lateral, multi-lateral, and international financial institutions for the valuable assistance provided to the Lao PDR in support of our efforts to address the challenges of climate change.

To conclude let me once again thank the organizers for giving me this unique opportunity to share my thoughts in this meeting of great minds. I am confident that your deliberations on this very important issue will be very productive and will translate into policies in your respective countries. I wish all of you a very fruitful and productive meeting, and wish you also a pleasant and enjoyable stay here in Vientiane, our capital city, and also encourage you to visit others parts of this beautiful country.

Thank you.

## **SESSION 1**

Climate Change and Women: 15 Years from the Beijing Platform of Action and Women's Empowerment for Adaptation Means to Climate Change

#### SESSION 1

## Climate Change and Women: 15 Years from the Beijing Platform of Action and Women's Empowerment for Adaptation Means to Climate Change Ms. Roohi Metcalfe

Gender and Governance Specialist

United Nations Development Programme (UNDP) Regional Centre in Bangkok, Thailand

#### [MC: Ms. Katie Dönszelmann, APDA]

I have the distinct privilege of being able to welcome you here today on behalf of the Asian Population and Development Association (APDA); thank you very much for your presence. It is fantastic to see such a wide range of countries and organizations being represented here today.

We would like to formally start this meeting with our first session, which is "Climate Change and Women: 15 Years from the Beijing Platform of Action and Women's Empowerment for Adaptation Means to Climate Change".

The Chair of this Session is the Honourable Surya Chandra Surapaty from Indonesia. He is on the Board of the Committee of Members of the Indonesian Forum of Parliamentarians on Population and Development (IFPPD). Honourable Surapaty is also a Medical Doctor, holds a Master's in Public Health from the University of Hawaii, and he received his Doctorate of Philosophy on Population Planning from the University of Michigan.

#### [Chair]

I was asked to Chair this session, entitled "Climate Change and Women: 15 Years from the Beijing Platform of Action and Women's Empowerment for Adaptation Means to Climate Change".

On my right is Ms. Roohi Metcalfe who is a Gender and Governance Specialist at the United Nations Development Programme Regional Centre in Bangkok. She worked for the British Government for 18 years. And over the past 20 years, she has been working with UNDP in issues such as health, population, and gender and governance.

I would like to give the first opportunity to Ms. Roohi Metcalfe.

#### [Ms. Roohi Metcalfe, UNDP]

In addition to what has been said about me by the Chair, I am also a proud grandmother of three granddaughters, so hence this interest in women. But I would also like to say that I am a gender expert, meaning both women and men – and I have a son as well – and I do work with both men and women. Although today's topic is on women, I will look at this from the angle of gender as a whole.

My quick definition of climate change is: "Climate change refers to major changes in temperature, precipitation or wind patterns lasting for decades or longer; it is also a reminder of a sometimes forgotten fact: we are ecologically interdependent. Human activity takes place within ecological systems not bound by political frontiers and will have generally negative impacts on the environment and on people's well being if not managed in a sustainable manner".

I am not a climate change expert but because I work in gender and governance I try, with my team, to take interest in all topics where gender should be reflected. It is also especially important that advocators, policymakers and legislators like yourselves, the parliamentarians, take interest for our sake; we look to you to bring these issues up in your country.

Last week, my colleagues – who are climate change experts – and I looked up the latest information on the top 10 emitting countries, which is from 2006. I was going to use the IPCC data, but our experts said that we should use that of the World Bank.

These are the top emitting countries, as stated in 2006 (see figure below).

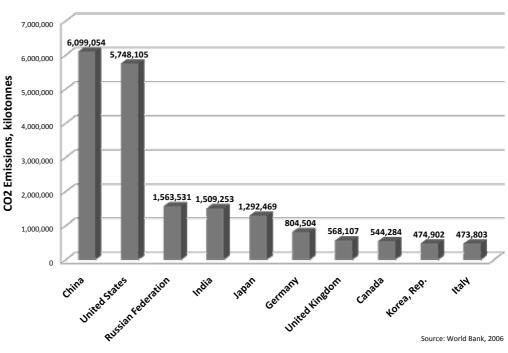
There has also been a lot of discussion on consumption and per capita. When put into that perspective the order of that same list of countries changes (see figure on page 35).

There is one diagram we use to easily explain the greenhouse effect, especially in our gender trainings. It shows that the sunrays hit the earth; then you have the greenhouse gas, which is the  $CO_2$  – that is how the heat is retained on earth.

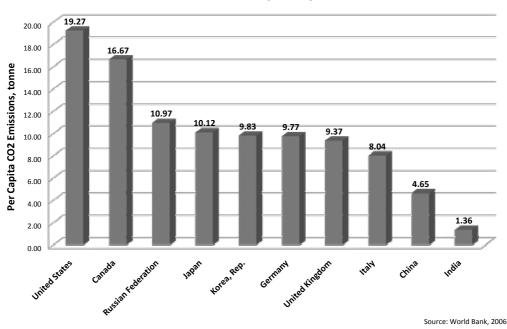
Next are some "Principle Causes", as follows:

- <u>The greenhouse effect</u>: refers to a rise in average global temperatures caused by the activities of humans. These activities lead to higher concentrations of gases in the atmosphere that absorb the sun's energy, such as carbon dioxide.
- The carbon cycle: is a natural process by which carbon is exchanged among the biosphere, atmosphere and oceans. It is one of the most important cycles of the earth and allows for the most abundant element to be recycled and reused throughout the biosphere and all of its organisms. Humans are adding CO<sub>2</sub> to the atmosphere much faster than natural processes can absorb the carbon, thus upsetting Earth's natural balance.

This is a good framework and diagram of elements of systems, which clearly explains how it happens (see figure on page 36).



Top 10 CO2 Emitting Countries (2006)



### Per Capita CO2 Emissions of Top 10 CO2 Emitting Countries (2006)

On mitigation, for example, there are the governance issues, technology, and there are the trade issues. If we look at adaptation, there are the issues of health, equity, population, consumption, and migration. I think it is very good for advocacy purposes, because it clearly explains and defines the drivers, the impacts and the responses.

This is just to give a brief definition: *Mitigation* involves a process of curbing greenhouse gas emissions from human activities. *Adaptation* involves a range of activities to reduce vulnerability and build resilience. New and improved technologies and financing initiatives at all levels are also receiving attention as part of the collective efforts to address climate change.

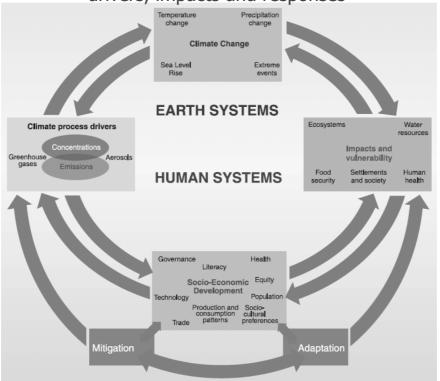
When we talk about gender, mitigation is more about clean energy and technology. Adaptation is more important – especially to work in population – because that is when we are looking at the effect on the population. We have, again, a chart on gender and climate change, which I think will be helpful (see figure on page 37).

This chart clearly defines what is it that you are really looking at when you are working in adaptation.

I spoke to the Lao Minister of Water Resources and Environment Administration, H.E. Khempheng Pholsena, before she left. As we all know from her speech, she has obviously done some great work. I was thanking her for mentioning that in adaptation we are looking at agriculture, forest, water resources and so on. On the other side in mitigation, you have energy efficiency and CDMs, which are Clean Development Mechanisms projects.

We must understand that when we are looking at gender, we are looking at both women and men. This is extremely important to us, because this is what the discussion this morning has been about: how population issues affect climate change.

# Schematic framework of anthropogenic climate change drivers, impacts and responses



There are institutions and mechanisms such as:

- IPCC (Inter Governmental Panel of Experts on Climate Change)
- COP (Conference of Parties)
- CDM (Clean Development Mechanism)
- National Adaptation Programme of Action (NAPA)
- GGCA (Global Gender and Climate Change Alliance)

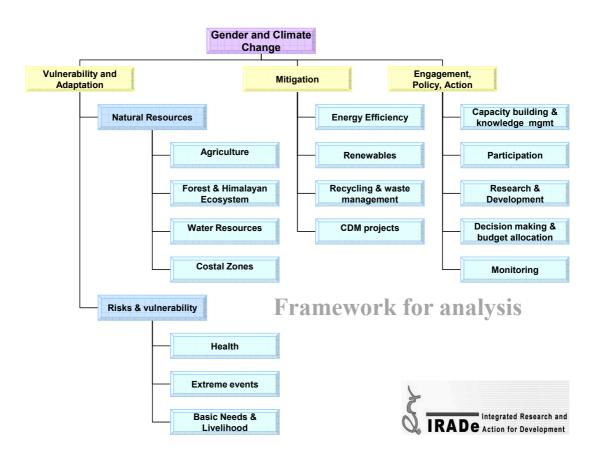
To us, the Global Gender and Climate Change Alliance (GGCA) is quite important. If you are working and/or advocating, you will find a lot of their latest documentation and discussions because there are many women working with them. There are also many UN Agencies working on this alliance: UNFPA, UNEP, UNDP. They have done some great work, especially in the Copenhagen dialogue and they are also preparing for Mexico. They have great websites to look at. There are key international instruments on gender such as:

- Convention on the Elimination of All Forms of Discrimination against Women (CEDAW)
- United Nations Framework Convention on Climate Change (UNFCCC)
- Hyogo Framework for action: 2005 to 2015 (Disaster reduction)
- Kyoto protocol (Establishes obligatory targets for industrialised countries on emissions)

I always leave the Kyoto Protocol in my presentation because there is still dialogue going on after Copenhagen; let us see what will happen in Mexico and how Kyoto is taken forward.

In the ICPD, which is for experts and parliamentarians working in population, there is a good quote from a great resource document:

"Advancing gender equality, eliminating violence against women and ensuring women's ability to control their fertility



were acknowledged as cornerstone of population and development policies in 1994 ICPD Programme of Action. As such, it remains an extremely relevant framework when considering climate chanae policies. Mitiaation and adaptation measures should ensure that ICPD principles – including a human rights-based approach to reproductive health and rights, rather than a focus on demographic targets - remain at the climate change centre of and population policies". (Climate Change Connections: UNFPA and WEDO)

Key potential climate change scenarios have been discussed this morning. Listed here are: water and other resource shortages, forest and the Himalayan ecosystem, agriculture and food security, coastal zones, and health.

Now, this is what I really want to talk about: climate change affects women. Climate change impacts are not gender-neutral; it hits both men and women. However, taking gender into account helps us to determine the full set of causes and the potential effects of climate change; gender is a significant dimension to take into account when understanding environmental change.

"Women poor between the poor" – this is very important, because when we are talking about poor, we have to see that within that we have to look at women which are more affected in the poor. Women are affected differently and are underrepresented in decision making; women can be key agents of adaptation and mitigation to climate change.

One of the many impacts on women is that deforestation or contamination increases the time women spend looking for fuel wood or safe clean water. For example, women in India now spend 4-5 hours a day collecting fuel wood where previously they would have done this only every 4-5 days. Health, of course, is also related to population:

- Increased morbidity and mortality due to heat waves; floods, storms, fires and droughts
- Greater incidence of infectious diseases such as cholera, malaria and dengue fever, due to the extension of risk seasons
- Increased malnutrition, diarrhoea, cardio respiratory diseases

Apart from malaria and cholera, I have also discussed HIV/AIDS in other presentations. Many HIV/AIDS clinics were destroyed in the Haiti earthquake in January 2010, leaving many people without their daily medicine which they were supposed to get – this is quite an issue when there is a disaster.

Regarding general and extreme events – in some of the analysis – during the cyclone in Bangladesh, it shows that 90% of the fatalities were women because they did not know how to swim, or where to run to the higher places.

An analysis of disasters in 141 countries found that when it comes to deaths, gender differences are directly linked to women's economic and social rights. In societies where women and men enjoy equal rights, disasters cause nearly the same number of deaths. It is extremely important to keep in mind how women are more affected – it is important to keep in mind why it is an issue.

As you know, UNDP produces the Human Development Report and it recognises that women are more vulnerable because of their gender and that it is important that women participate in planning processes to adapt to climate change. It is a proven fact and there is data to prove this statement.

Women are not just victims; they are also agents of change. Women's

participation efforts are imperative to combat global warming. Incorporating and investing in women's capacity as innovators, educators, leaders and caretakers strengthen programmes and projects. Women's indigenous knowledge – particularly of forest issues, for example – is very important because they live in the forest and know how to take care of the forest. When the parliamentarians are taking care of their constituencies, it is also especially important to see that women are a part of the dialogue, the communitylevel dialogue.

In terms of a few good global practices – now, this is extremely important. The Lao Minister was talking about what they have done in their NAPAs this morning. We know that every country has done something. These are a few examples that were updated in December 2009:

- Bangladesh: NAPA 2005 mentions women several times.
- Nepal: A National Climate Change Policy in draft. Many women participated in dialogues.
- Sri Lanka: Adaptation measures such as soils conservation, flood mitigation. Woman to man ratio of participation in energy projects 80:20.
- GGCA (the Global Gender Climate Alliance) brings over 30 UN agencies society and civil organizations that to ensure climate change decision-making, programmes at all policies and levels are gender-responsive.

To us, people working in gender, you look to the parliamentarians to please keep an eye on what is happening in the dialogue and whether women's issues are being reflected in these NAPAs.

There is a need for an integrated approach in the NAPAs in the way forward. There are alternative approaches to climate change adaptation based on vulnerability reduction, such as natural resource-based approaches. On-theground livelihood activities can be linked with policy processes, and when we talk about identifying multistakeholders, the key one is definitely the parliamentarians.

I see there are parliamentarians from 13 countries present here and I would like to hear from you about how many times this issue has come up in the parliament. It is good to know how much of you are discussing climate change, and how much you do- or will talk about gender issues.

In her keynote address, it was good to hear that the Lao Minister is putting gender on top. It is also important that parliamentarians keep an eye on the NAPAs, as well as:

 Review and revise legislation to better deal with the challenges of CC

- Keep an eye on NAPAs
- Give keynote addresses
- Work across parties in working groups
- Ensure that the Copenhagen deal is inclusive

It is very important to work across parties in working groups. Some of the successes we have seen are when parliamentarians are working across parties, especially when there are woman caucuses.

In closing, I thank you very much for inviting me and I hope that my very brief presentation was helpful to you.

Thank you very much.

#### [Chair]

Thank you very much to Ms. Metcalfe for an excellent presentation.

#### SESSION 1

## Climate Change and Women: 15 Years from the Beijing Platform of Action and Women's Empowerment in Vietnam Hon. Dr. Ho Thi Thu Hang

MP, Vietnam; Member of the Vietnamese Association of Parliamentarians on Population and Development (VAPPD)

#### [Chair]

On my left side is the Honourable Member of Parliament, Dr. Ho Thi Thu Hang from Vietnam. She is a Member of Parliament and a member of the Vietnamese Association of Parliamentarians on Population and Development. Head of the Gynaecology and Department of Vietlong Hospital. From 1994-2007 she was a Medical Doctor, Deputy Head and Head of the Gynaecology Department of Vietlong Hospital. She graduated from Saigon Medical College in 1994.

Now I would like to give the opportunity to Hon. Dr. Ho Thi Thu Hang from Vietnam.

#### [Hon. Dr. Ho Thi Thu Hang, Vietnam]

I am very happy to share my experience with you on the title "15 Years Since the Beijing Conference and Women's Empowerment in Vietnam".

In this presentation, I would like to address four issues. First, "Vietnam's profile"; second, the "Main achievements on gender equity in Vietnam, 15 years after the Beijing conference"; and the third, "Women's empowerment in Vietnam, dealing with climate change". After that, I would like to give six recommendations.

First of all, I would like to introduce some of Vietnam's data profile.

Vietnam has a total population of 85.7 million people, as registered in 2009.

The GDP per capita was US\$1,200 in 2009. The literacy rate is 96% (male); 93% (female). The total fertility rate is 2.01. The infant mortality rate: 17‰. The population over 60 is about 9.7%.

In the Parliament of Vietnam, there is one house, the same as some of the representatives from the countries. There are 500 MPs that serve 5-year terms and are directly elected by the people. The Vietnamese Parliament has 10 Standing Committees – the Committee for Social Affairs is in charge of the gender issue.

The Vietnamese Association of Parliamentarians on Population and Development (VAPPD) has been a very active member of the Asian Forum of Parliamentarians on Population and Development (AFPPD) since 1992. The Vietnam Women Parliamentarians Association was established in 2008 and 26% of Vietnamese MPs are women.

What has been changing in Vietnam after 15 years from the Beijing Women's Conference? Have there been changes in gender issues in politics? Have there been changes in the gender issue in the health field; in the economy; in climate change?

Change in politics – female parliamentarians in Vietnam from 1982 to 2012: in 1982, it was about 21%, and in 2008, about 25.7%. There have been many legislations concerning gender issues that have been approved as laws. The first is gender equality in 2006; domestic violence in 2007; population in 2008; Land and Health insurance in 2008; elderly; disability; education; and the labour code.

Through the implementation of the Law on Gender Equality the Parliamentary Committee for Social Affairs of the Vietnamese Parliament:

- Screen gender issues on all bills before presenting them to the parliament for discussion
- Publish an annual defence for government report on gender equity at the Parliament plenary session

Over the past 15 years, Vietnam has made some of the most progress on gender equality among ASEAN:

- 91/157 gender development index; and 50/93 for gender empowerment measures;
- 2nd position in Asia; and 1st in ASEAN on gender issues;
- Since the approval of the Bill on Gender Equality, 30% of the MPs are women;
- The next general election will be in May 2011 and it is expected that there will be even more female MPs after that.

The second issue is the changes that have been made on health issues. Even though Vietnam is in the group of low income countries, it has been able to become more advantaged in the public health field:

- 62% of the population is covered by health insurance (as planning for health insurance for all by 2014, set by law);
- There has been success for family planning and reproductive health care as MMR has been reduced by two-thirds; half for IMR
- Contraception (Prevalence) Rate (CPR) has gone from 60% (1995) to 79% (2009)
- Decreasing maternal mortality

between 1995 and 2009: in 1990 it was about 120 per 100,000 live births but in 2009 it dropped to 70

- Average time of health checking for pregnancy increased from 2.1 in 2000 to 3.1 in 2006
- Decreasing total fertility rate in Vietnam, from 1995 to 2009: in 1995 it stood at 3.8; and in 2008 it dropped to 2.01
- Infant mortality rate amazing decrease from 1995 from 45 per 1,000 live births, and in 2007 around 20
- Child malnutrition was reduced from 44.9% in 1994 to 18% in 2009

The third point is the changing of the socio-economy. There is now more gender equality in socio-economic activities:

- Economic participation: 83/85% (F/M)
- F/M in labour force is: 49.4/50.6%
- 34% of employees in the sociotechnology field are women
- 55% of university students are women
- F/M head of poor household: 89/90%
- Women's football team Vietnam is 1<sup>st</sup> in ASEAN, but the men's team is only 2<sup>nd</sup> or 3<sup>rd</sup>
- In 2004, 60% of land tenure titling in Vietnam were men; since 2009 through the new Land Law the joint-title has risen to 90%

The fourth point is about the empowerment of women and climate change:

- 50% of the population living along the Red River and Mekong Delta River are seriously affected by climate change – many are women
- There are 12 million female farmers in country
- Some diarrhoea cases occurred in Vietnam 2008-2009, even in the capital city
- In 2009 dengue cases increased by 2-3 times
- Domestic work: 60% are women;

	Women		Men	
	Ν	%	Ν	%
Heard, understand	9	13.8	104	29.1
Heard, don't understand	17	26.2	127	35.6
Have not heard	39	60	126	35.3
Total	65	100	357	100

Table 2: Access to weather forecast information by sex

Source: Calculated based on UNDP Survey on Climate Change and Poverty (2008)

10% men; 30% both women and men

Regarding women's empowerment and climate change:

- Gynaecological disease is increasing by 3-4 points compared to last year due to drought and shortage of clean water
- There is a lower health status for 52% of women versus 40% for men
- 33% of men have pensions compared to only 19% of women
- In 2002 the IMR in rural groups was nearly double that of the urban groups – this is the same for MMR

In the table, you can see that only around 14% of women understand the weather forecast information and the number who have not heard is 60%; for men, 29% have heard and understood the weather forecast, and the number who have not heard is 35.3% (see figure above).

In decision making at the family level in Vietnam, men make the final decision on big investments in production; investments in clam, fish and shrimp raising; investments in buying clam ponds; land and large amounts of money/credit; and high priced purchases such as TVs, motorbikes, furniture, etc. However, women make the final decisions on food expenditures; clothes; school fees; small purchases; selling poultry such as chickens and ducks; selling fish and shrimp at low value.

Interestingly, more women are selfemployed and working in agriculture: 52.2% for males 61.7% for females.

The fifth point is the recommendations for parliament on gender and climate change:

- Legislations should ensure gender equity in all levels of society
- There should be more advocacy on gender and climate change
- Compile good evidence-based information on gender and climate change
- Ensure that gender issues are being integrated in any policy and strategy dealing with climate change
- Empower women on the family and country level
- Ensure population stability in all regions

Thank you for your attention.

# [Chair]

Thank you very much Dr. Ho Thi Thu Hang for your excellent presentation.

# **SESSION 1**

Discussion

Chair: Hon. Dr. Surya Chandra Surapaty MPH, PhD

MP, Indonesia

#### [Chair]

I now invite participants to ask questions about the session.

#### [Hon. Avinash Khanna, India]

I would like to ask a question to our resource person from Vietnam.

It has been just told that there is 90% joint titles between women and men in Vietnam. How was it possible to enact this law? Was there resentment among the male population? Is it that the man purchases the property but then the woman automatically becomes the joint titleholder; or if the woman purchases the property does the man become the joint titleholder? What is the legal implication of this?

Secondly, what are the conditions of this joint title?

# [Chair]

Next person, please. Malaysia.

#### [Hon. Abd Rahman Dahlan, Malaysia]

The representative was saying that 62% of the population in Vietnam is covered by health insurance. That is a remarkable number. Could you please explain to us how did you do that? Those are remarkable statistics by any means. Thank you.

# [Chair]

Next please, from the Philippines.

#### [Mr. Ramon San Pascual, PLCPD]

This question is particularly for the presenter from Vietnam. The other policy question is also regarding the quite amazing achievement in decreasing the maternal mortality in a span of 15 years or so. How was it done? What

sort of policies, programmes and interventions were done in order to decrease maternal mortality? Thank you.

#### [Hon. Prof. P.J. Kurien, India]

The Vietnamese MP said that 26% of MPs in Vietnam are women. I would like to know whether there is a law that a certain percentage should be women, or is it just by choice of the political parties?

#### [Chair]

Vietnam, please.

#### [Hon. Dr. Nguyen Van Tien, Vietnam]

Madame Roohi Metcalfe, you have provided a lot of technical information concerning climate change. As an MP, I know that we need more information that is suitable for other MPs. What do you recommend our parliament to do to deal with the climate change? What kind of laws should we issue or consider? Thank you.

# [Chair]

There are five questions to our resource persons; four to Dr. Ho Thi Thu Hang from Vietnam and one to Ms. Metcalfe.

Please go ahead, Ms. Metcalfe.

#### [Ms. Roohi Metcalfe, UNDP]

I would actually be the one asking these questions to the parliamentarians. I will give some suggestions but I am, as you said, a technical expert. You are the legislators, the decision makers, and you know your country. It would be so good to hear from the countries that are here how many times they discuss climate change on the agenda, in the parliament; and secondly, is there any discussion of women and men?

The main thing is this that you have your own plans in the country, such as the National Adaptation Programmes of Action (NAPAs) which are very important. You are aware of what is happening by the executive of the country and how the parliamentarians can look into those NAPAs.

I picked up the ICPD Programme of Action and I think there are great plans coming up in population activities. On the governance side, however, it is your NAPAs and any other regulations that are needed to come on climate change. I think it is important that legislators are required to have this information, so that they can bring it up in the parliament.

If I have missed out anything, I would like UNFPA to kindly add to this.

#### [Chair]

Mr. Najib Assifi, please.

#### [Mr. Najib Assifi, UNFPA APRO]

Thank you very much. It is a pleasure to add a few words to this very important topic.

As I mentioned in my statement earlier, UNFPA is very proud that over the past years we have been working very closely with parliamentarians.

One of our major concerns, as was very rightly pointed out by the honourable Member of Parliament from Vietnam, is how we can identify action points that a parliamentarian will undertake to make a big difference. That has been a big challenge, not only with the issues of climate change but for all other issues as well. We do have a number of guidelines for parliamentarians that the different partners have developed – we could make those available to at least provide a way forward. The other way is that we can identify one or two parliamentarians that can act as champions in most of the parliaments; especially those parliamentarians who have knowledge or an interest in addressing the issues of climate change in a broad fashion. Perhaps a point of entry is that population and development committees that are set up within the parliaments take the initiative and identify those parliamentarians who are knowledgeable about these issues and willing to enter into the debate.

I would also like to point out that past publications of the "UNFPA State of the World's Population Report" address the issues of climate change. It has a whole set of recommendations on how the parliamentarian can address these issues at the highest level of policy, as well as broad-based advocacy and of raising the awareness their constituents about the impact of climate change on the population; and explain that relationship between the population growth, size, distribution, and population movement with the climate change.

There are a range of issues and materials that are available, but perhaps what we need to do is take it one step further and distil a few points, put it in a succinct fashion in shorter publications on what the parliamentarians can do to impact on the issues of climate change. Thank you.

#### [Chair]

Malaysia, please.

# [Hon. Abd Rahman Dahlan, Malaysia]

I would just like to add on the comment by Mr. Assifi from UNFPA.

I think that the UN and all the international groupings must have a way to help all the NGOs in the developing countries, and the media can highlight awareness of climate change within that particular country. It cannot be just government-led initiatives – it has to be NGOs.

Malaysia has been very lucky in that sense. We have a very strong NGO especially on climate movement, change and environmental issues. Our media has been very vocal and, therefore, we have a very high-level cabinet committee on climate change which is headed by none other than the Prime Minister himself. There have also been a number of other government initiatives, such as tax exemptions. What we are trying to say is that apart from government-led initiatives, I think that the UN, the agencies, and all Asian Parliamentarians' meetings must also help the NGOs and the media in respective countries. Thank you.

# [Chair]

Yes, Madam.

#### [Ms. Mieko Yabuta, UNFPA]

I think there are common things in terms of the role of parliamentarians and what to do but maybe it is also country-specific. One of the things that the parliamentarians can- and should do is put it on the national agenda to generate a national debate. For example, former American Vice-President, Mr. Al Gore, did this through his documentary, "An Inconvenient Truth". He put climate change on the agenda and then raised people's awareness, so I think that is probably the start. Through the national debate including the NGOs and civil society – I think each country should be able to find their own solution, also taking into account the technological or scientific evidence.

Of course what UNFPA would expect the members of national parliamentarians' associations to do is link it to the population issues, because this climate change is largely manmade. Whatever we do, whatever we decide, the causes of this climate change will affect the future generations. Thank you.

#### [Chair]

Please go ahead, Ms. Metcalfe.

#### [Ms. Roohi Metcalfe, UNDP]

I am very glad that this point has been brought up and I am glad that this point of NGOs has come up. This is why I had put this GGCA in my presentation; it has NGOs in it and is a good example of where the UN system is working with NGOs.

I am very happy that the MP from Malaysia said there is a high level cabinet committee – that is where the technical information has to be given to yourselves so that you can bring up the agenda of gender and population and climate change. Thank you.

#### [Chair]

Yes. From Vietnam.

# [Hon. Dr. Nguyen Van Tien, Vietnam]

In Vietnam, during the last two years, we have organized several seminars on climate change, gender and population issues for MPs, and representatives from NGOs and international organizations. But going through all of the conference, most of them just provide technical information like you present; and regarding what can the parliament do in the future, they do not give evidence-based, such as is just awareness raising.

Climate change is increasing. Because the parliament is socio-economically political, they need evidence-based proof. I think that we need strong evidence-based data and analyse the information to make it focused and concise for MPs; otherwise, if you just give the information, they will forget everything they should do when they go back to their home countries after a conference. Thank you.

#### [Ms. Roohi Metcalfe, UNDP]

We have a "Human Development Report" on climate change which is global and I am very happy to say that at the end of this year, there is another regional Human Development Report on climate change which will give you hard data. Plus, as Mr. Najib Assifi said, a State of the World Population report is already available.

#### [Chair]

Yes, please, India.

#### [Hon. Avinash Khanna, India]

As we know, this is a very serious problem. With this climate change there come the health problems, resource problems, and there are other problems. We need to sensitise the people to fight these problems - we will have these problems until the people are sensitised. Like my colleague from Vietnam has said, awareness raising seminars are very important. So, to sensitise the public on the impact of climate change, there should be such an atmosphere that the public should demand that such laws should be there to save their lives.

# [Chair]

Please give us the response to your questions, Hon. Dr. Ho Thi Thu Hang.

#### [Hon. Dr. Ho Thi Thu Hang, Vietnam]

Regarding the role of women in Vietnam, it is tradition that the role of women is very important. She must take care of her family, bring up their child and teach the child everything. And now the woman attends to- and takes part in social activities.

The reduced fertility rate of women in Vietnam was also mentioned. We have set up many programmes in Vietnam to care for pregnant women. For example, we have many communication programmes to help pregnant women understand the importance of checkups during pregnancy. We also supply some therapeutic pills for women during their pregnancy.

To answer the question about 26% of the parliamentarians in Vietnam being

women: it is because we, the MPs in Vietnam, are directly elected and chosen by the people.

# [Chair]

Yes, please, India.

#### [Hon. Avinash Khanna, India]

My question has not been answered about the land title. How is it possible?

#### [Hon. Dr. Ho Thi Thu Hang, Vietnam]

I would like to ask my colleague, Hon. Dr. Tien, to assist me in answering the questions.

# [Chair]

Hon. Dr. Tien, please help with the answers.

#### [Hon. Dr. Nguyen Van Tien, Vietnam]

With regard to the question about land title, land is considered to be "in the family", meaning that the man and the woman are the landowners. Thus, it only sits in the family.

Before, joint-title holding of the land was very low but with the new laws since 2004, 90% is now shared by the husband and wife in the landownership certificate. If the couple divorces, the court identifies this. Have I answered your question?

#### [Hon. Avinash Khanna, India]

Not yet, but we could discuss that during lunchtime.

# [Chair]

Any other comments?

#### [Ms. Roohi Metcalfe, UNDP]

May I add just a few examples on the technical side?

There are some countries where the parliamentarians request the Ministry of Environment to do analysis on the various figures. Of course there are the Human Development Reports and the global reports but if you want the country-specific analysis, the parliamentarians can set up standing committees. Some of the analysis that we have seen does not include gender, unfortunately. The figures have been provided by the environment ministries. I am not sure how they do it in the population policies but the health ministry could do that. What I have seen in the environmental analysis is that the gender perspective is not there. But in one country, the parliamentarians have recently requested that they kindly provide a gender perspective as well, so they are vehicles in the countries for providing this.

# [Chair]

We will now open the second round of questions and answers. Yes, from Laos.

# [Hon. Dr. Koukeo Akhamontry, Lao PDR]

I would like to come to the issue to be discussed during this session, which is in fact the relationship between women and the adaptation policy to cope with climate change. I find the two presentations very inspiring but I still have some questions. The first is for Madam Roohi Metcalfe.

Could you give me some details about good practices of empowering women in Bangladesh, Nepal and Sri Lanka? This would be very useful for other countries. Thank you.

#### [Chair]

Yes, from Indonesia.

#### [Hon. Ledia Amaliah Hanifa, Indonesia]

I want to ask a question to Ms. Metcalfe. It is about the climate change which will cause the rising of the emerging diseases. Could you kindly give us an example, perhaps from your projects, of how we can empower women to make them realise the dangers of the diseases and how it causes most the victims to be women and children? Thank you.

# [Chair]

Thank you. From Laos, please.

#### [Hon. Bang On Sayarath, Lao PDR]

My question is on climate change, and especially on women as agents of change. It seems to me that we put more work into women and not gender as a whole.

We can change some of the work on gender. Our work could be to give more opportunities to women; or men can change their attitude on how to help women so that they can be released from the hard work, released from the poor. Thank you, Mr. Chair.

#### [Chair]

I now give the floor to Ms. Metcalfe to respond to these questions.

#### [Ms. Roohi Metcalfe, UNDP]

These are very deep questions to me.

Fourteen countries have been examples and I have put some of them in my presentation but these are not all on population. The manual which has come out from UNFPA and UNDP gives some good and up-to-date examples on gender and climate change from 2009. This will hopefully be updated further at the end of this year, and I will give you my e-mail address if you would like any additional information.

The second question from Indonesia was again on good examples and practices. The NGOs, governments and even parliamentarians are all working hard together on how to move ahead, especially after the Copenhagen conference.

There is another publication I brought with me which has a very good example. It states, "We know what women need". This has been put together by both men and women and refers to the delegate from Indonesia's question about agents of change, which is very important. I feel that in each of the countries, as the representatives from UNFPA said, it is very country-specific.

NAPAs, National Adaptation Plans. Out of the 14 countries represented here, I would be interested to know how many have formulated NAPAs. I know that they have discussed it in Lao PDR and I have just learned that India is working on it. This is what the parliamentarians need to know. It is extremely important that we, as gender people along with UN agencies and parliamentarians, reflect gendersensitive NAPAs. In each country the parliamentarians need to know at what stage you are. And, for us, the parliamentarians are very important to the work that is being done in between Copenhagen and Mexico.

# [Hon. Dr. Tan Seng Giaw, Malaysia]

Malaysia has a cabinet committee on climate change. We are now formulating a framework policy on climate change, from a holistic approach. And we have also submitted 49 greening projects to the secretariat in Bonn on the Clean Development Mechanisms (CDM). We are number five in the world.

#### [Ms. Roohi Metcalfe, UNDP]

The Lao Minister, again, talked about support from the Global Environment Facility (GEF) – every country has GEF projects. These GEF projects are very small, but they do deal with population and environment issues.

#### [Mr. Shiv Khare, AFPPD]

I do not think that these small project types work with parliaments. They are most probably with selected NGOs; they are not very widely spread.

# [Ms. Roohi Metcalfe, UNDP]

The Lao Minister has discussed that to some extent.

#### [Hon. Dr. Nguyen Van Tien, Vietnam]

I think that because some people are working with the government and some with the officers, we do not understand what we need to do in parliament. We need some recommendations here for laws on environment, laws on the effective use of energy, and other laws. Thank you.

#### [Ms. Roohi Metcalfe, UNDP]

All I can say is that there are, indeed, laws on energy but very few countries have these laws. This is something that the parliaments have to take forward.

#### [Mr. Najib Assifi, UNFPA]

Mr. Chair, if I may come back to this topic there is a need for developing more specific information for the parliamentarians. There is so much that a parliamentarian can do but we really need to put the actions that the parliamentarian needs to take on paper in a very practical manner.

I can fully appreciate and understand the frustration of the honourable Member of Parliament from Vietnam, and surely this sentiment is shared by others. Perhaps we are talking on broader issues too much and not giving them more specific information on what to do next and on what issues to take action. Perhaps this could go into the recommendations as something that we all have to work on and develop in the future.

# [Chair]

Yes, Lao PDR.

# [Hon. Dr. Koukeo Akhamontry, Lao PDR]

I just would like to comment about the issue of how to get women empowered in coping with adapting to climate change. We have experience in empowering women in other issues such as education and renewable energy but here the issue is how to first formulate an adaptation policy which is gender-sensitive - this is the issue. Women can be involved right from the first stage of policy formulation. some countries, In however, all staff are men; in this case how can we get women involved? This is the issue, and that is why I asked the question about how the countries mentioned in the presentation, such as Sri Lanka and Bangladesh, get women involved in the climate change adaptation policy formulation or implementation. This is the issue, Mr. Chair. Thank you.

# [Ms. Roohi Metcalfe, UNDP]

I am very glad that you said that the national adaptation policy plans are the most important. As Mr. Assifi has said, and what came from Vietnam, the need is perhaps to have a fact sheet handout for the parliamentarians to take forward.

But I still go back to the issue of where the parliamentarians are already working and aware of what is happening in their country. What they can do is to take this as a topic to a standing committee where information is provided in the parliament and ask a question on this climate change issue and gender or population.

Coming to your question, I will give you one example of Bangladesh. Bangladesh worked with the UN system and NGOs on what we call "Disaster Preparedness", and there were policies and projects. This is GEF in which a country is given money where women were involved. The parliamentarians ensured that these committees, which are formed at the community level, at least have women representation. And in Bangladesh or Sri Lanka there were not any women at all but then it became 80%/20% men/women, so women came in the decision-making - this is one concrete example.

Second is where in the NAPA, they included women-specific indicators to take that forward, which will assist for women to be a part of the climate change debate – this is how they were done.

I would like to link this with the good information that the honourable MP

from Vietnam gave in her presentation earlier. We saw that many – and mostly – men have access to the weather information. When a disaster happens, how much information is given to the women? These are the programmes which are very much happening right now – information giving, technical assistance and also the involvement on decision making is very important.

# [Chair]

Yes, from the Philippines; after that, Malaysia.

# [Mr. Ramon San Pascual, PLCPD]

We should prepare the women of our population and provide them the control in terms of the household, their own health, their own education, caring for their children, and then you already prepare them for the next disasters that could happen.

I am telling this from the perspective of the Philippines. We had terrible typhoons last year, and this was covered globally by the media. There were two very strong typhoons: one that was hitting right in the centre of government which was the national capital region, Metro Manila; the other was in the northern Philippines. In both cases the entire country was caught off-guard and the height and the strength of those two typhoons – particularly typhoon Ondoy – struck mostly women and poor families.

One lesson and realisation from the typhoon is that poverty affects 40% of our population, mostly women. But there was another factor. This is why I auickly auestion how maternal mortality was reduced in Vietnam. The Philippines is one country where there is not a comprehensive plan on reproductive healthcare vet, as provided for by the government. In fact, family planning is quite controversial and that is why we do not have a standard programme on family planning, meaning that our women

particularly cannot attain the number of children that they would want. We still have between 3-4 children per family; what is desired is between 2 and 3. This is very much again like in Vietnam. I can just imagine that if the Philippines would have ongoing reproductive health care – even family planning just over the past 10 years the disaster of last year's typhoon that struck would not have been as big if women were able to control and provide for the care and the health of their children.

When we talk about the role of the national committees on population and development, I think the undertakings of the national mandate of the committees on meeting the ICPD targets are important. This is so that we can provide the facilities for the empowerment of women, members of the household, and society. Right away then, the level of preparedness is heightened and climate change would not be as big of an issue as in the Philippines last year.

There was a knee-jerk response: a month after the two typhoons struck in the Philippines, the congress suddenly had to act and right away they passed the climate change law. And yet, in the end, the controversial law on reproductive health care is still being debated upon, so you see the imbalance there.

So – first and foremost – we must be able to provide for the health of women, and empowering the role of women in caring for the family and their children.

#### [Ms. Roohi Metcalfe, UNDP]

The Philippines has asked for a cost-benefit analysis. It is very important at the end of the day that parliamentarians have oversight and that there is a budget which goes through parliament.

I am glad that you brought up ICPD. When I was invited here, the first thing I did was think what is it that I can bring here as a technical expert, working with parliamentarians and NGOs. I am surprised that the Philippines has brought that up because you do have issues there. Yes, the ICPD is a great framework for parliamentarians to work through. This is where APDA, AFPPD, and we can play a role in providing information so that you can take these stances. Thank you.

# [Chair]

From Malaysia, please.

# [Hon. Abd Rahman Dahlan, Malaysia]

I would like to share our experiences in the Malaysian parliament. I suppose that when you want to create awareness at the grassroots level, one of the biggest obstacles is money. For Malaysian Parliamentarians like me, we can, for example, write in to the Ministry of Natural Resources and Environment and give them a simple request for some funds for me to do grassroots activities on awareness of climate change. We can do that and we can get the money.

For example, we have been writing in and we have been getting around US\$30,000 per year. This US\$30,000 per year given to the MPs can be used quite liberally, as long as it is with the theme of environment and climate change; even the participation of women in vis-à-vis climate change. I think that gives a lot of advantage to the MPs to educate the grassroots. Thank you.

# [Chair]

From India, please.

# [Hon. Prof. P.J. Kurien, India]

Ms. Roohi Metcalfe has mentioned renewable energy and given some examples. Clean energy is one of the most important necessities for mitigating climate change, but energy is also being used for cooking, for example. Rural women depend on firewood; firewood means cutting down trees. One way we can avoid this is by using solar cookers through solar energy. But solar energy is not even mentioned here. Why is that?

Number two, with regard to solar energy, the cost can be unbearable for ordinary families and poorer countries do not have the technology. My question is what the UN can do to transfer the state–of–the–art technology to the poorer countries.

This is also happening in India with wind production. energy Many countries have started to use wind energy but the importance of that area is not being exploited. Wind energy is cheaper but the capital cost is higher and many of the developing countries able to meet are not those expenditures. It was shown today how much carbon dioxide is being emitted by developed countries, where the per capita is much more. Can the developed countries not help the poorer countries in producing cleaner energy, such as wind- and solar energy? What can be done by the UN?

#### [Ms. Roohi Metcalfe, UNDP]

India actually has a NAPA for climate change. It also has a clean energy plan and examples of what you have talked about – wind- and solar energy – are included.

But again, coming back to what you have said, it is the cost. The UN is working with all the countries present here today; with the parliamentarians and especially with your environment department dealing with energy projects. Perhaps the parliamentarians of India, for example, could discuss the budget issue to provide more funding.

#### [Hon. Prof. P.J. Kurien, India]

What I am asking is what the UN can

do in transferring the state-of-the-art technology from the developed countries to the developing countries, and what can we do?

#### [Ms. Roohi Metcalfe, UNDP]

As previously mentioned, the UN is there in India and working very closely with you. In India, the UN has been working with policies and projects which have come up. One example of these projects where funding is already available – and I think we will be getting more information very soon – is the GEF. Whenever a country comes up with a policy, there is a funding to it and the projects are formulated but the transfer of technical advice is given by our advisors; we have a whole team there, which is working with the environment.

#### [Chair]

Thank you very much for the interesting discussion that we have gone through during this session.

I would like to conclude in two points which I think are very important for us to take back to our countries to follow up.

First, parliamentarians can play a very important role to better deal with the challenges of climate change by reviewing and revising legislation to better deal with the contenders of climate change, keep an eye on the NAPAs, give keynote addresses, and collaborate across parties in working groups to ensure that the Copenhagen deals are inclusive.

Second, we must always remember that there is a very close relationship between women's empowerment and adaptation to climate change.

With this conclusion, we close our discussion on this session. Please give a salute to both our resource persons, and I wish that we all work together. Thank you very much.

# SESSION 2

# Linking the Responses to Population Issues with Adaptation Strategies to Climate Change

# SESSION 2

# *Linking the Responses to Population Issues with Adaptation Strategies to Climate Change*

Climate Change Adaptation Strategies and Population Policies: Finding the Best Links for Sustainable Development

# Dr. Adrian C. Hayes

Senior Research Associate Australian Demographic and Social Research Institute, The Australian National University

# [MC]

We would now like to start Session 2, which is "Linking the Responses to Population Issues with Adaptation Strategies to Climate Change".

Our Chair for this session is the Honourable Yukio Ubukata from Japan. He is the Vice-Secretary-General of the Democratic Party of Japan, which is now the ruling party. He is also the director of the Committee on Security; a member of the Special Committee on Anti-Piracy Measures and Prevention of International Terrorism, and Japan's cooperation and support.

He received his education from Waseda University in Tokyo and his previous careers include being a reporter, a university lecturer, and an economic analyst.

# [Chair]

Good afternoon everyone. I thank you very much for your kind introduction.

We have two wonderful experts with us today to kick-off this session, and then we will move on to a general discussion.

Our first speaker for this session is Dr. Adrian C. Hayes. Dr. Hayes graduated from Brown University and studied population at Michigan University. He is currently the senior researcher at the Australian Demographic and Social Research Institute at the Australian National University.

I would now like to invite Dr. Hayes to give the first presentation, please.

#### [Dr. Adrian C. Hayes, ANU]

I am delighted to be invited to this important meeting. Thank you for the invitation.

#### 1. Introduction

Climate change is already with us, and much more is on the way. The Intergovernmental Panel on Climate Change (IPCC) 4<sup>th</sup> Assessment found the evidence for global warming of the climate system "unequivocal"; and that it is "very likely" the increase in global average temperature observed since the mid-20<sup>th</sup> century is due to the observed increase in anthropogenic GHG (greenhouse gas) concentrations in the atmosphere.

The sequence causal is now well-established in science: human activities - especially those centring on producing, from fossil, fuels the energy we need for development and living modern high-energy lifestyles - cause the concentration of GHG in the atmosphere to rise; this, through the "greenhouse effect", changes the balance between the amount of solar radiation reaching the earth's surface and the amount re-radiated out into space again, causing global warming of the earth's surface and lower atmosphere; the additional heat in the system inevitably changes weather patterns and other aspects of climate aside from changing temperature - the physical properties of climate systems mean you can not change the temperature without also affecting precipitation, wind patterns, the hydrology of rivers and glaciers, ocean currents, etc.; this climate change in turn has impacts on ecosystems and on human populations.

The causal sequence is well-established in science but we have to recognise that there is more uncertaintv associated with the later steps in the sequence than the earlier ones. We now understand well, and can measure emissions with impressive accuracy, GHG concentrations in the atmosphere, rises in surface temperature, rises in sea level, etc., and the various quantities involved are consistent with one another in terms of well-known physical laws. There is still a lot of uncertainty, however, regarding how global warming will affect the climate system as a whole, and even more uncertainty regarding how climate will impact on ecosystems and affect human populations.

modelling has Climate improved enormously over the last two decades and the uncertainties here are gradually being reduced to more manageable proportions. The 5<sup>th</sup> IPCC Assessment, due in 2013, will focus more on these later steps in the causal sequence and it promises to say much more about human adaptation to climate change.

Regardless, there is already wide consensus that "business as usual" if emissions scenarios \_ not significantly mitigated \_ would eventually change climate so much as to prove disastrous for human populations, and for many other species.

What often not adequately is appreciated in the public debate about climate change is the amount of change we are climate alreadv "committed" to. There is a substantial time-lag between а rise in concentration of greenhouse gases in the atmosphere and the resulting rise in temperature due to the associated increase in radiative forcing. Even if global GHG emissions could be miraculously stopped today, global warming would still continue for several decades to come because of momentum in the system. We do not know precisely but CO<sub>2</sub> released into the atmosphere appears to have a half-life of a century or more: 50% or so of the CO<sub>2</sub> released in 2000 will still be in the atmosphere in 2100.

Today we have not even experienced yet all of the global warming which will result from the unprecedented levels in GHG emissions of the last several decades, let alone prepared for the additional warming which will result from future emissions.

conclusion is inescapable: The Adaptation is now an imperative. In its early years IPCC focused mostly on the effects of anthropogenic emissions on climate and on the mitigation of those effects by reducing emissions. This was considered top priority; the Panel felt that too much attention to adaptation might lead some policymakers to believe that a massive reduction in emissions could be avoided if we could adapt to climate change anyway. Unfortunately the Kyoto Protocol was not implemented on schedule by enough developed countries to have much effect and now we are faced with the urgent imperative of adapting to climate change. Mitigation and adaptation strategies must now be pursued hand-in-hand. Without prompt action on this many of the hard-won development gains of the last 50 years could soon be put in jeopardy.

#### 2. <u>Linking population policies to</u> <u>adaptation strategies</u>

We do not have perfect knowledge of how the climate will change and what environmental hazards will result for specific populations. The IPCC 4<sup>th</sup> Assessment talks about these things in fairly broad terms. For Asia the projected impacts of climate change are discussed under the categories of:

- Changes in freshwater availability;
- Increased flooding of coastal areas;
- Compounding of pressures on natural resources; and
- Changes in disease vectors and microbes brought about by changes in temperature and hydrological cycles.

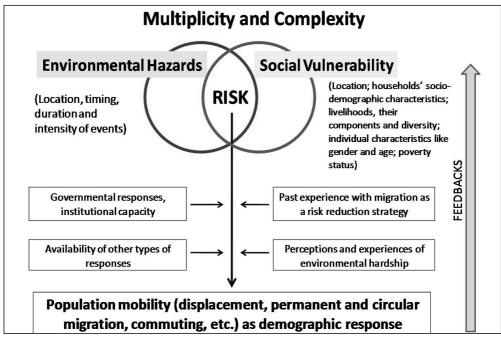
The threats such impact pose to human life and welfare are expressed in terms of probabilities: extreme flooding which previously we might have expected in a particular place once every 50 years or so might now occur once every four or five years, for example. It is convenient here to express the risk to population as a function of the environmental hazard on the one hand, and the vulnerability (or its converse, resilience) of the population on the other.

To reduce risk we either reduce the hazard (though mitigation) or we reduce the vulnerability of the population to this hazard (adaptation). adaptation Mitigation and are complementary activities in this perspective. This conceptualisation also makes it apparent why we need both mitigation and adaptation.

There is a significant asymmetry between mitigation and adaptation which is important for our argument. Mitigation requires we drastically reduce our dependency on fossil fuels for supporting development and our modern high-energy lifestyles. This will require developing new technologies to provide clean energy; and for many population groups who consider themselves "modern" it will probably require significant shifts in values and lifestyle, especially regarding the way these populations relate to nature. Mitigation requires major technical and social innovation.

Adaptation does not. With adaptation it is not the problems which are new but the frequency, scale and location of these problems which is new. Many human populations have long histories of reducing their vulnerability to high temperature, low temperature, high rainfall. low rainfall, changing coastlines, etc.; over the centuries they have improved their resilience and learned to deal guite successfully with these hazards. The heightened risk associated with climate change is due to the changing frequency, scale and location of these hazards; some populations risk being overwhelmed by the novel scale and frequency of otherwise-familiar hazards, others risk being overwhelmed by hazards which are novel to them and for which therefore they are unprepared.

That is the kind of situation which national adaptation strategies will have to deal with: problems which in themselves are not new to humankind and which we know how to solve, but which will be occurring with new intensity and in new locations where local expertise and other resources are not enough on their own to deal with them. Adaptation will require myriads of adjustments to behaviour and organization at the local level as well as national policy interventions. The fact that the environmental hazards projected to be brought about by climate change are not in themselves new is the reason national adaptation strategies can to a large degree build on, or borrow from, so many existing development policies. Development, especially sustainable development, is the best adaptation strategy.



Source: Adamo (2009).

This is certainly true in the case of population policy. Many of the policy interventions implemented in Asia to respond to population issues can be seen, on inspection, to contribute to the kind of population resilience which is needed to adapt to climate change.

In the remainder of this presentation I look at six areas of population policy – population growth, population health, education, poverty reduction, and migration and urbanisation – and examine the extent to which these policies can be applied to climate change adaptation. The emphasis is on how population policies can be linked to adaptation strategies, but I will also note where these same policies are relevant to mitigation efforts as well.

#### 3. Population growth

The main population issue that Asian governments have responded to over the last 50 years is, of course, rapid population growth. Overall the policies have been effective: as a result of broad-based social and economic development on the one hand and government-supported family planning (FP) and reproductive health (RH) programs on the other, the growth rate for Asia's population as a whole has declined from 2.4 percent per annum 40 years ago (1965-70) to 1.1 percent today.

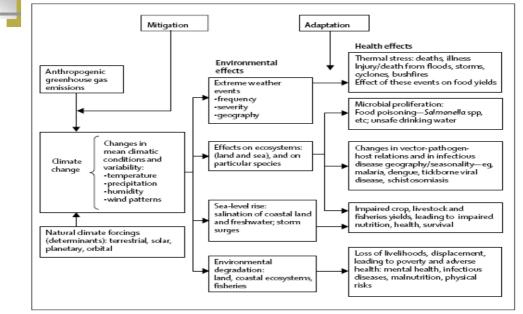
There is little doubt that, other things being equal, a population approaching a stable size and structure will have an easier time mitigating against and adapting to climate change than a population that is rapidly growing. Population growth can only be expected to add to the rate at which emissions are growing, to add to future emissions, and to add to the number of people who are vulnerable to the adverse impacts of climate change.

Nonetheless we should not oversimplify the situation and see all population growth as "negative." National populations are heterogeneous, both among their internal groupings and when compared to one another. If we compare the major regions of Asia we note important differences: Western Asia as a whole has a population growth rate of 2.0 percent per annum and a total fertility rate (TFR) of 3.0 live births per woman, well above replacement level. In this case the expansion of FP & RH programs can be justified not only on the grounds it is needed to promote and protect citizens' reproductive rights but also because it is needed as a cornerstone of any effective climate change adaptation strategy.

At the other extreme Eastern Asia has a population growth rate 0.6 percent per annum and a TFR of 1.7 live births per woman. Fertility here is significantly below replacement level - indeed many countries in the region are experiencing ultra-low levels of fertility and their governments are struggling to find ways to encourage young couples to have more children (Jones et al. 2008) – but population growth is still positive. In this case population growth is due not to high fertility per woman but because of "population momentum," i.e., because there are large numbers of women in the child-bearing ages resulting from high fertility in the past, so even though each woman on average has less than two births during her lifetime the annual number of births still exceeds the number of deaths by a considerable margin.

It is important to make the distinction between growth due to high fertility growth due to and population momentum because many commentators on climate change do not and as a result their comments on the role of population are often grossly misleading. At one extreme we have commentators who say climate change is about economic development, consumption and affluence, not about population growth; they suggest bringing the concept of population growth into the debate is tantamount to blaming the victims. This view misses the point that population growth has been an important historical driver behind current GHG concentrations, and even if those populations which are currently growing rapidly are not major emitters

# Schematic summary of main pathways by which climate change affects population health



Source: McMichael et al. (2006: 860).

today their rapid growth still has major implications for stabilising GHG concentrations in the future at a time when these populations will be developing rapidly.

At the other extreme we have alarmists who point out the world's population will grow by close to another 3 billion by mid-century and that "something" has to be done about it if we are to cope with climate change. This view ignores the fact that much of this projected growth will be due to population momentum; unless you advocate measures of a very extreme kind, which no one is seriously proposing, then there is not in fact very much you can do about much of this population growth except adapt to it. These commentators also often fail to acknowledge that it is precisely because SO many governments, especially in Asia, already responded effectively to population growth several decades ago that we now expect the world's population to peak during the present century at 9 billion - it is not so long ago we thought the peak would probably be around 12 billion, and perhaps as high as 15 billion.

Population growth continues to be an important issue and our response to it can be linked to climate change adaptation (and mitigation), but not in a simple one-size-fits-all fashion. While some countries in Asia still face development problems because of high fertility most do not. For most Asian countries currently developing climate change adaptation strategies the issue regarding population is not whether anything can be done about its size or growth rate which will help it to better adapt to climate change, but what can be done about the quality of its human resources which will help it to better adapt. It is these issues of population development to which we now turn our attention.

4. <u>Population health (including RH)</u> Climate change can affect population health via multiple paths, some more direct than others (WHO 2009). My ANU colleague and IPCC reviewer, Tony McMichael, distinguishes four main types (see chart on previous page).

Extreme weather events can impact health in various ways. Heat waves, for example, can cause elderly people to die of heat stress, even in modern cities like Chicago and Paris. They die because they are poor, they cannot afford air-conditioning, and they are afraid to leave their bedroom windows open at night when they sleep because they are afraid of crime. Floods are another example: they can contaminate drinking water and cause outbreaks of diarrhoea. cholera, and other water-borne diseases. A different kind of path is where climate change leads to reorganization of species in ecosystems (Lafferty 2009), including disease vectors like mosquitoes and ticks, thus causing changes in the incidence and prevalence of vector-borne diseases like malaria and dengue. Climate change can also add to the environmental degradation of agricultural landscapes, raising concerns food security about and the considerable health risks associated with malnutrition, especially among infants, young children, their mothers, and pregnant women.

Public health officials are already familiar with all these health risks. and considerable progress has been made over past decades to reduce these risks and all but eliminate some of these diseases over vast areas where they were previously endemic. Climate change is not producing new diseases (although that is a theoretical possibility). The challenge is climate change can produce old public health problems with new intensity and in new locations. Health systems are already struggling in most developing countries to cope with the public health problems they already face. These systems risk being overwhelmed by additional caseloads and by the geographical redistribution of some of the old infectious diseases, meaning that the public health systems and expertise which have been slowly built up over decades to manage these diseases could now simply be located in the wrong place.

Health systems will be challenged in novel ways by climate change and they need to be strengthened so they can deal with the new challenges. If human populations are to adapt to climate change it means individuals will have to adjust their behaviour patterns over time in countless ways. People who are healthy may find this relatively easy to do; those who are sick may find they lack the necessary physical and mental strength to cope. Successful adaptation requires a population to be healthy.

Developing countries spend far less as a proportion of GDP on health than developed; we have to avoid at all cost the kind of situation where climate change causes a deterioration in population health, which reduces the population's adaptive capacity, which in turn leads to more disease, establishing a vicious circle from which it is difficult to exit. There are already many reasons for strengthening health systems in developing countries; good health is both an end in itself and a of development. means Climate change adds to the list. It is important to invest more in health in developing countries, not only because climate change will likely contribute to additional burden of disease unless pre-emptive actions are taken, but also because any level of disease in a population limits its potential for change, innovation and adaptation.

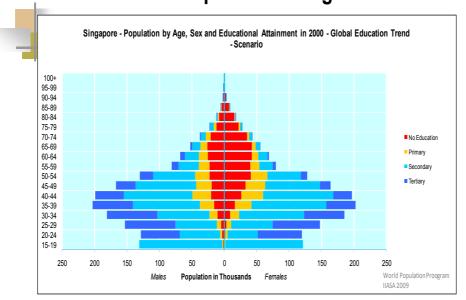
In short, improving population health contributes to climate change adaptation because:

- unhealthy people will be especially vulnerable to new health risks brought about by climate change; and because
- healthy people are better able to cope with the non-health-related problems about by climate change in everyday life.
- 5. Education

health builds resilience of a lf generalised kind education builds resilience in terms of skills. As one of the UN reports on climate change (WHO 2009) emphasises, "In general, countries with more 'human capital' or knowledge have greater adaptive capacity. Illiteracy increases а population's vulnerability to many problems." Adaptation will require countless decisions by people in their everyday lives over the coming decades; decisions will have to be made to adjust to new conditions and improve adaptive capacity at all levels, including individuals and their families and local communities. Governments will need to intervene as appropriate and establish the right kind of policy environment. Command and control strategies are unlikely to be optimal; it is important that local populations will be empowered as well as resourced to adapt to changing local conditions. An educated population will be better able to rise to this challenge than an undereducated population.

Moreover, schools are an important channel for educating the next generation about climate change and sustainable development and for getting the message out into the population at large. Note the way population is a long-term investment in a population's adaptive capacity.

Looking at the population pyramid this way – based on the work of Wolfgang Lutz and his colleagues – also helps us forecast future strengths and vulnerabilities, and plan accordingly.



# Linking the responses to educational needs with CC adaptation strategies

Source: Lutz (2009).

Of course social organization and social capital will be important too, but communities with good human capital will be better able to develop social capital, bottom-up, too.

In sum, improving education levels contributes to climate change adaptation because:

- people with knowledge, cognitive skills, and an open mind, are more likely to innovate and discover successful ways of coping with problems brought about by climate change in everyday life;
- illiterate people are especially vulnerable to the hazards of unpredictable change; and because
- investing in education toady has a positive impact on adaptive capacity for decades to come.

6. <u>Gender equity and poverty reduction</u> Proponents of sustainable development have since the beginning understood the importance of social justice; sustainable development requires removing at least the most egregious forms of social inequality. Removing all forms of discrimination based on gender is one such imperative.

Removing gender discrimination is not only morally the right thing to do, it has practical benefits too, and these need to be emphasised. Most countries prosper because of the hard work and ingenuity of their populations. Sex discrimination means women cannot participate in the development process on equal terms with men. It means the society cannot run at full capacity. Development runs best when the talents of everyone are cultivated and can contribute to the overall effort.

In a population with much gender inequality females will be more vulnerable to the stresses and strains brought about by climate change than males. This is especially the case where gender inequality is compounded by other social and economic disadvantages. As Naila Kabeer (1996) has pointed out, it is in the context of poverty that women are often most disadvantaged: they often work harder than men, but find it more difficult to convert that labour into money income; if they do earn an income they are often not given the choice as to how to spend or invest it; and if they do have the choice they are more likely than men to spend it on others – their children, their family, their relatives – rather than on increasing their own welfare.

Reducing gender inequality and reducing poverty contribute to climate change adaptation because:

- gender inequality and poverty both result in some people and some communities being especially vulnerable to climate change by virtue of the fact they are not empowered to mobilise the resources they need to take pre-emptive action to enhance their own resilience;
- an added irony is that these kinds of inequity in a population mean the people who are most likely to be among the first to experience the adverse effects of climate change in their daily lives are not able to contribute lessons from their experience to the political decision-making processes designing adaptation strategies for the population as a whole.

Renewed efforts at reducing gender inequality and reducing poverty can serve as important pillars of a climate change adaptation strategy; these efforts increase the resilience of the most vulnerable sections of the population.

#### 7. Migration and urbanisation

Migration will be a major adaptation strategy of human populations (and other species). Some commentators in the West are fuelling fears that climate change could produce a tidal wave of "climate change refugees" from the developing world which threatens to flood into developed countries. These fears are exaggerated, at least for the immediate future<sup>1</sup>: experience shows that the vast majority of people forced to move for environmental reasons choose to move short distances whenever possible. Most migration will be local, as for example we see already in some of the large deltas like the Mekong where households, with government assistance, are already moving to higher (or artificially raised) ground to avoid annual floods, but organized within the same commune.

The flooding rain in Phnom Penh was on the front page of *The Cambodia Daily* on 21 April 2010. The big story here is urbanisation. Asia's urban population today is around 1.8 billion, representing 42% of total population; the urban population is growing at 2.3% per annum, much faster than the population as a whole.

The urban population is expected to overtake the rural in size around 2025 so that by 2050 the urban population will still be growing rapidly while the rural population will already have been declining for a couple of decades or more. There will also be regional differences in Asia for percent of population designated urban since 1950, and projected to 2050.

Yet current policy responses to urbanisation are clearly woefully inadequate. Flooding, common in many Asian cities, is symptomatic of the policy failures here: we know how to build cities so they will not flood, but have allowed our cities to develop

<sup>&</sup>lt;sup>1</sup> Of course, if global mitigation efforts are not put into effect soon and average surface temperature rises by more than 2 or 3 degrees Centigrade causing local climates to become unrecognisable, then all bets are off: at the moment we are talking about "manageable" levels of climate change, and are assuming that mitigation efforts will be put into effect in time to keep climate change within manageable proportions for the foreseeable future.

other priorities. in response to Statistics taken from UNFPA's latest State of the World Population, show how serious this problem could become with climate change, given that so many of Asia's megacities are located in coastal areas. Many of these megacities cities, with few notable exceptions, continue to be allowed to grow and "develop" according to plans which give only low priority (at best) to environmental and climate change considerations (De Sherbinin et al. 2007).

We need to become "climate smart" and build resilience into our built environment. We need an approach to design urban which is both people-friendly and environment-friendly at the same time. Birkland (2008) suggests we need to think of "virtuous cycles" connecting human populations and living ecological systems, not simply of reducing our ecological footprint (see also Rees 2009). A good way to do this is to use principles which mimic nature. Japan is a leader in such innovations.

Making our cities climate smart is an essential component of climate change adaptation (and mitigation). This is because:

- our cities especially the large global megacities – are our major "engines of economic growth"; we cannot afford to allow them to become more dysfunctional;
- our cities have been allowed to grow in ways that are far from consistently people-friendly or environmentally-friendly;
- an ever-larger proportion of Asia's population lives in areas designated as urban; if the population is to adapt to climate change then our cities must become climate smart;
- this requires a redesign of the urban built environment, and a

rethink of values and lifestyles.<sup>2</sup>

#### 8. Concluding remarks

We have touched on six areas of population policy and shown how each can contribute in an essential way to climate change adaptation. The response to these population issues is rarely adequate at present; climate change introduces an added imperative to do even better in the future.

There is an emerging consensus that for developing countries more development is the best adaptation to climate change. That is not to say that "business as usual" in developing countries is sufficient: climate change gives an added imperative to make sure that all development is sustainable, which is far from the case at present. Indeed if development in the past - in both developed and developing countries – had been implemented in sustainable ways then we would not be facing the challenge of climate change today.

In this presentation we have linked responses to population issues to climate change adaptation, but only in broad terms, schematically. Each country will have to work out the details appropriate to its own particular circumstance. This will require careful study of the precise risks facing different groups within its national population. It will not be

<sup>&</sup>lt;sup>2</sup> The topics of changing values and lifestyles (to make them more consistent with sustainability) and what policymakers can do to facilitate this is beyond the scope of this presentation, but it's worth noting in passing that the international population-and-development and public-health communities have much relevant experience in how to design effective interventions aimed at behavioural change. Moreover, values emphasising harmony with nature (central, some would argue, to living sustainably) have historically been far more prevalent in Asia than in the West (where domination of nature was more common).

sufficient to simply say, for example, that we will expand our efforts to improve population health because we know this will also increase our population's adaptive capacity to climate change. The efforts need to be expanded in evidence-based ways to maximise their effects both on health and on adaptive capacity (and in ways that do not result in additional excessive amounts of GHG emissions). This requires (i) detailed study of the nature and magnitude of the added for that health risks particular population due to climate change; and (ii) reform of health systems and current programmes to address the specific new risks to health at the same time as sustaining overall long-term improvements in population health as a whole.

Population is an essential component of sustainable development. It is important that the population and development community – especially our parliamentarians – does all it can to make sure population and population policy remain central to the discussion about climate change adaptation strategies and are not side-lined.

In conclusion:

- To fashion the best links between population policies and climate change adaptation strategies will require detailed studies on a case-by-case basis;
- The scale of financial and technical transfer from developed to developing countries envisioned is unprecedented. For successful adaptation strategies to eventuate will require major changes in governance in many countries;
- An ever-larger proportion of Asia's population lives in areas designated as urban. If the population is to adapt to climate change then our cities must become climate smart.
- This requires a redesign of the

urban built environment, and a rethink of values and lifestyles.

Climate change has taken the discussion of sustainable development to a new level. It is a genuinely global issue. A population perspective is essential for developing successful adaptation strategies.

Thank you.

# [Chair]

Thank you very much, Dr. Hayes.

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# SESSION 2

# *Linking the Responses to Population Issues with Adaptation Strategies to Climate Change*

# Hon. Prof. Dr. Pinit Kullavanijaya

MP, Thailand; Secretary-General, The Asian Forum of Parliamentarians on Population and Development (AFPPD)

# [Chair]

The next speaker will be Hon. Prof. Dr. Pinit Kullavanijaya. I am sure that you are very familiar with him as the Secretary-General of AFPPD. The office of AFPPD is located in Bangkok and with his support the office is functioning very well.

Hon. Dr. Pinit is also an expert as a doctor and studied medicine in the UK; he also worked at Chulalongkorn University until 2003.

[Hon. Dr. Pinit Kullavanijaya, Thailand] Thank you very much honourable colleagues. It is my pleasure to talk to you about AFPPD and climate change.

For the past three decades, the Asian Forum of Parliamentarians on Population and Development (AFPPD) has been promoting and advocating for sound population and development strategies with- and amongst policymakers, parliamentarians, and opinion leaders. We have worked focusing on own Asian region and our in partnership with international organisations and civil society with the understanding that the issues we target are both national and global in nature, and have both immediate and far-reaching consequences for ourselves and the generations to follow.

Today, in the face of challenges posed by climate change, the necessity to support sound policies and practices is more necessary than ever. At AFPPD, we have initiated broad discussions on climate change at our General Assembly, and on climate change and gender with Ms. Roohi Metcalfe of UNDP. In partnership with IFAD, we have also recently hosted a conference on indigenous peoples, climate change and rural poverty.

#### Climate change and development

The prominence of climate change on AFPPD's agenda reflects the gravity of its impact. UNDP's Human Development Report of 2007/2008 called climate change "the defining human development issue of our generation". Climate change is defined as "any change in the climate, whether due to its natural variability or as a result of human activity". It is a reminder of our interdependence. It is also a reminder that as politicians and policymakers, we work in a dynamic environment that requires us to look both to mitigate negative impacts in the immediacy, and adapt to ensure the protection and well-being of future generations. Climate change adaptation, then, is the initiatives and measures we look to take to reduce the vulnerability of natural and human systems against the effects of climate change.

On the eve of 21<sup>st</sup> Century, we witnessed and supported responses to an increasing spate of natural disasters, the scale of which are limited neither by national boundaries nor socioeconomic divisions. In this past decade alone — indeed, in this past year — we have seen earthquakes in China, Haiti, Indonesia and Pakistan: a bitter winter wiping out millions of livestock upon which the livelihoods of many depend in Mongolia; intense heat waves, floods and dried up rivers in India; and drought continued with severe potential impact on agriculture in my own country of Thailand. We have also seen the beginnings of potential global crises around food security and natural resource management. We know we are capable — all of us — of efficient and effective response in the face of these challenges.

We know the importance of this in alleviating the immediate tragedy brought about by climate change, and we have looked to implement practices that may reduce the frequency of these occurrences. Many of us in Asia have put policies in place to mitigate climate change, including reducing the demand for emissions-intensive goods and services, increasing efficiency gains, increasing use and development of low-carbon technologies, and reducing fossil fuel emissions. But accepting that climate change is occurring, we must also look to the long-term welfare of the communities and people that we all serve and support effective adaptation strategies for existing and future generations.

Knowing the inevitable changes that will happen over the next few decades, we as parliamentarians will need to support addressing climate change. As our governments examine and commit to international mitigation strategies, we must also advocate for adaptation strategies as a crucial package of successfully addressing the effects of climate change.

In Asia, national governments are largely responsible for formulation and implementation of the adaptation plan, from local to national levels. Currently, national governments attach high priority to development policies and plans. Climate change is a cross-sector issue that impacts each and every issue on our current development agendas including: poverty, malnutrition, food insecurity, availability of drinking water, indebtedness, illiteracy, and unemployment, to name only a few. We must recognise that if the climate change phenomenon is not properly understood — that if we do not integrate adaptation *with* mitigation in our coping strategies — and that if we do not act in a timely manner, climate change impacts will exacerbate all of these pre-existing conditions.

As ever, we look to climate change adaptation strategies that enhance our existing initiatives to support gender equality and socio-economic development for the most marginalised populations. Inclusion of these principles will not only promote adaptation and mitigation strategies but will also make development more distributive.

Developing countries tend to be more seriously impacted by climate change, while simultaneously having less assets and capacity to adapt. This has led to more activities to integrate adaptation within development and poverty reduction programmes. The rise of adaptation as a development issue has been influenced by concerns around minimising threats to existing progress on poverty reduction, notably the MDGs, and by the injustice of impacts that are felt hardest by those who have done least to contribute to the problem, framing adaptation as an equity and rights issue. What is crucial to note is that in addressing issues of social equity, we must also remind ourselves that irrespective of cause, the consequences will continue to impact us all.

Noting this, in our adaptation strategies, we should also take the following into consideration:

- Effects of climate change vary by region, even within our countries
- Effects of climate change may vary across demographic groups in the

immediacy, but if not properly addressed, will invariably negatively affect everyone

- The implementation of adaptation strategy will come at a cost
- Many opportunities for adaptation will be beneficial regardless of the actual effects from climate change taking place

However, mal-adaptation can result in negative effects that are as serious as the climate-induced effects that are being avoided. As such, we must carefully examine the initiatives under consideration and ensure we look at existing data and information. Doing so will enable us to more effectively look at solutions that might already exist in our national and local contexts. While acknowledgement of past and existing challenges is crucial, the most successful adaptation strategies fundamentally require an assessment of- and shift from past unsustainable practices in industrialisation and urbanisation. Therefore, those currently in the continued process of development are poised to both discover and implement innovative approaches for adaptation based on national and local knowledge. Indeed, the potential of national and local knowledge as a basis of adaptation to climate change is enormous.

Successful adaptation strategies, then, are a win-win situation if properly implemented.

# Linkage with population issues

It is predicted that by next year the world's population will reach 7 billion. Already, our planet currently supports more people than ever before. The impact on food security, natural resources, public health, and overall development has been enormous. As we have already seen, if not properly addressed, population issues can fuel conflict, instability, famine and epidemics. The global population growth dynamics incredibly are relevant, particularly for the Asia

region, when looking for successful adaptation strategies to climate change. A staggering 97% population growth over the next 40 years will happen in Asia, Africa, and Latin America. Nearly 90% of today's youth — 1.2 billion people — are in developing countries. "Population momentum" in countries with a large proportion of young people will result in continued high growth rates despite declines in fertility. Even as fertility declines significantly, population growth will continue for years to come.

What does this mean for climate change? Most environmental problems, including those that arise from climate change, are aggravated by population growth. In the long term, lower fertility in low-income countries may reduce global greenhouse emissions. However, lower fertility is usually associated with economic development, including urbanisation. Unless patterns change, urbanisation and higher standards of living will lead to higher per capita greenhouse gas emissions. Many of us have already looked to low carbon paths and models of development. Indeed, in this, we have an opportunity to support new models of development imbued with the wisdom of past experiences and new innovations.

The terrain of population issues is changing, too. The urgency felt in the early days of the population movement — to curb populations because of reduce shortages — is still being felt today. But the pressure has increased — the effects of climate change add increased urgency to our work on population. It is not simply that we have "more mouths to feed", as that adage goes but climate change, if not properly addressed, slows the pace of our national development goals.

Therefore, we parliamentarians need to bring climate change into our advocacy for population issues. The landscape of the population debates has changed. It is time that we recognise this within our national discourse. It is time we bring the importance of adaptation strategies when we tackle population growth and family planning.

#### Policy recommendations

We may look to several policy areas to address the integrated issues of population and climate change. As noted by UNFPA's Agenda on Population and Climate Change, there are numerous existing strategies in the area of population that can build on existing practices in our countries.

First, promoting reproductive health, the empowerment of women, and addressing unmet needs for family planning are all key underlying strategies for slowing fertility growth rates. More urgently than ever, we need to actively promote our base agenda for reproductive health as a key long-term adaptation and shorter-term mitigation strategy for climate change.

Second, as parliamentarians, we must activelv support advocacv for adaptation and mitigation strategies addressing climate change. We need to bring strong evidence-based arguments to our parliaments on integrating adaptation with mitigation. We also need to focus on urban planning, and begin seriously examining more sustainable models of urbanisation, particularly with continued population growth. Urban centres, especially those in the developed world, are the primary source of greenhouse-gas emissions. Unmanaged urbanisation very often tends to outpace the development of infrastructure and environmental safeguards, leading to high pollution and carbon dioxide emissions which impact on climate change.

In particular, urbanisation patterns impacts not only greenhouse emissions

and climate change, but also food security and natural resources management through the transfer of human resources from agricultural production to urban-based industries. In our advocacy for adaptive urbanisation, we must also ensure we address the enormous repercussions for food security and natural resource management.

Third, we need to start bringing the issues of gender and reproductive health into climate change discussions, both internationally and nationally. At the national level. when our parliaments discuss climate change, it is crucial for population issues to be linked. As parliamentarians, we are well positioned to bring these issues to the fore. and we must be knowledgeable about the linkages between reproductive health and climate change.

Finally, as our countries struggle to adapt to the changing realities of climate change, we must continue to work for a cross-sector approach to issues that are integrally linked. As we can see, population issues — including reproductive health — are key in adaptation and mitigation of climate change. Our responses, too, have been and must continue to be integrated, based on cooperation, innovation, a sharing of best practices, and honest assessments of gaps and challenges.

We hope to continue addressing the linkages between population and climate change. Upon our return home, I look forward to seeing each of us supporting the crucial linkages between population and climate change for the development of successful adaptation and mitigation strategies.

Thank you very much.

# [Chair]

Thank you very much Hon. Dr. Pinit.

# **SESSION 2**

Discussion

# Chair: Hon. Yukio Ubukata

MP, Japan;

Director, The Japan Parliamentarians Federation for Population (JPFP)

#### [Chair]

Now it is now time for discussion. Please ask questions and also make comments.

Yes. Malaysia, please.

#### [Hon. Tan Seng Giaw, Malaysia]

This is to Dr. Hayes. You said that the evidence against greenhouse grasses and other human activities is unequivocal. How do you explain the human crime of the manipulation of data at one of the British universities?

And secondly, from what you have said regarding the measures for adaptation, the developing countries are not able to fulfil this need. You would need substantial assistance from the industrialised nations. How do you go about doing that?

# [Chair]

Please go ahead, Dr. Hayes.

#### [Dr. Adrian C. Hayes, ANU]

On the data – yes, I have looked at this. I do think the data are unequivocal. There are always reasons to question and ask further questions about data and so on – that is the way science works and that is the way it has been working. But the issue at the University of East Anglia was a little bit different, where somebody had basically stolen some things.

There are around three commissions in England that are looking at this. Two of them have finished their work and found that no one did anything wrong, although some of the language used in some of the e-mails might have been a little inappropriate but that is the way that science proceeds. They have the data – everyone can examine the data. They will do things a little bit differently in the future because the data have not always been readily available to everyone and that has been recognised as a bit of a mistake, but that is a new innovation anyway. It used to be that it was very difficult to get someone else's data. However, the trend now is to make the data very publicly available.

Nonetheless, putting that aside, there is a lot of doubt and questioning out there. One wants to be honest and fair about this, and think, "well, OK, people are raising legitimate questions". The media, commentators and parliaments should also do this. But when you look at it very closely, I think it gets a little bit more nefarious, a little bit more worrying.

We have been through this before; we have been through this in public health with smoking. When the evidence starting coming out in the 1960's and the 1970's, the tobacco industry themselves knew that the evidence was faultless, but they fought because there was an economic interest at stake. They could not refute the evidence and when you look at the record for 30-40 years, they never refuted the evidence. They kept people to doubt, "Oh maybe it's not that bad; maybe this, maybe that." Now we are seeing this with climate change.

Greenpeace have done a study which is trying to follow the money. A Lord or a Minister or parliamentarian may come to Australia, be on the television a lot and is in the Murdoch newspapers, and so forth.

There are some interesting things going on and what you tend to find is that the people who raise questions might have some scientific background. If they raise the questions enough – as a sceptic – they can become disputed by some of these groups. It is a little bit worrying, but the actual science of the IPCC – for us in the working groups who are really looking at the science of climate and the temperature rising – is just flawless.

Will Steffen is a colleague at the Australian National University. He is pivotal in Working Group 1 and has a report which is almost 1000 pages. After it came out in 2007, no one has found one mistake in that report which has held water. People say things, but then the comment disappears. Some groups have been proven to be wrong. It is mind-boggling to produce a report like that and no creditable person has been able to show that they were wrong on anything. I think what we will have to expect is that there will be more movements to try to cast out on all of this. But I think that is very unfortunate.

The second question was about assistance. I not know the precise answer to that. But do I know that various funds are being set up and figures such as US\$40 billion are allocated or leveraged – very impressive numbers. In the end, I think the main concern here will be governance.

Those of us who have worked in development a long time and love development work recognise that things are often not as effective as they could be, or as we would hope. If you talk about those enormous amounts of money, the sharks are likely going to start circling in the water – we have to be realistic about that. It could all go horribly wrong. People talk about the need for money and for technical assistance but that can go very wrong; it could completely distort political processes and all sorts of things, not to mention corruption.

We need to look at what can be done about it from a parliamentarian point of view. One of the things that I have working noticed after with the government for 20 years is that the parliamentarians do have the leverage over making sure that their government bureaucracy is a meritocracy; government bureaucracy is a meritocracy. If it is not a meritocracy it means that the donors come up with good ideas and projects, and they will negotiate them around the table and say, "That is a really good idea". We have not been doing it that way, so it is going to be much better to do it that way in the future. And then they roll out the project but the bureaucrats have no incentive in their structure to change, so they do not change. One of the things that then happens is that a lot of the money goes for the training programmes.

I have been in a privileged position to have been able to evaluate many projects. A very common pattern is that the money gets spent, and you can see that it has been spent - by and large and legitimately - on the civil service. They have all of these clarifications that they did not have before; they have equipment that they did not have before; and they have all of these vehicles that they did not have before. You look at a project document on "the poor"; when you look at the poor after five years, the government officials cannot come up with a statistic showing unequivocally that the poor are better off now than they were five years ago - that is a real problem.

I have been part of these projects myself. You train the people thinking that the person is going to use the training so that they can do a better job. But they do not because they just use the training to get a promotion, so two months later they are doing something for which they were not trained and the cycle goes on and on. We have been doing this for 40 years and we should be in a position to do it better. But if we do not do it better when we have these enormously new amounts of money, which we hope will be able to support health and education in the name of climate change, it could all go horribly wrong.

I think that governance is going to be the key concept to look at in terms of how we transfer the financial and technical assistance for one group of countries to another. When I say "governance", I am not only referring to the central government; I am also referring to the local government, donor organizations, and all the international organizations. If it is not transparent and transferable, it could all go very sour.

# [Chair]

Thank you very much. Next, India please.

# [India]

Dr. Hayes – as you know well, climate change has multiple impacts; on health, on economy, on production, on land, and so on. If increasing rainfalls ruin crops in some areas, then the whole country will suffer. Some countries have exploited natural resources and developed, and now developing countries are suffering from the impact of climate change, but do they have to pay the price?

# [Dr. Adrian C. Hayes, ANU]

There are the issues of justice and equity. I think we need an agreement eventually. It will determine what concentration target can be acceptable; if some countries exceed the target, they have to reduce it while others are allowed to the target. It will be similar to the Montreal Protocol. For that we need some assistance to developing countries, or more like compensation, but I have not really thought about it carefully yet.

Australia has immigration policies and there are issues surrounding immigrants' rights. For example, do immigrants have the rights of developing countries, or do they automatically have to conform to developed countries' situations? For these complicated issues, I do not have answers but I feel sympathy for them. We know that the Western countries caused these issues but they did not know what the effects would be at that time.

# [Chair]

Thank you. Cambodia, please.

# [Hon. Ly Son, Cambodia]

Please allow me to express some ideas about the flood in Phnom Penh.

As Dr. Hayes mentioned, some parts of Cambodia were flooded on 21 April 2010. Indeed, with the efforts of the Royal Government and in close cooperation with international organizations, development partners, and NGOs, we have gradually improved the infrastructure in Phnom Penh, but we could not fully respond to the floods. I think that the real problem with the flood in Phnom Penh was polluted water from the garbage that has just been thrown on the streets.

In my opinion, the development of the physical infrastructure is important but the development of knowledge, morality, and the spirit of responsibility is the most important.

# [Dr. Adrian C. Hayes, ANU]

Thank you, sir. I did not mean to pick on Phnom Penh – I had a lovely time there. What happened in my example could have happened in many cities. I am not trying to be critical of Phnom Penh at all, but in terms of future development the worry could be that as it gets bigger it could go the same way as some of the larger cities of Asia have. In those cities, the very pattern of development that they have used tends to embed some problems such as environmental problems.

I think what we are learning with cities - even though we have learned it very slowly - is that when you abominate nature and just replace it with concrete, nature comes back and bites us in the teeth; you can not do that beyond a certain limit. We did not know that in the past but we do know it now. I am very drawn to these discussions which are much more about mimicking nature rather than dominating it, which I think is a very Asian approach. But in the West we always talked about dominating nature, conquering nature and not living in harmony with nature. Maybe that is where we went wrong in the Enlightenment Period and we kicked the Romantics out.

# [Chair]

Yes, Indonesia please.

#### [Hon. Surya Chandra Surapaty, Indonesia]

I have a question to Dr. Hayes. I am glad you bring Jakarta as an example of a city experiencing climate change. What specific recommendations to the Government of Jakarta and parliamentarians of Indonesia do you have to make the city become "climatesmart"? Thank you.

#### [Dr. Adrian C. Hayes, ANU]

Thank you for your question. This is a difficult question.

I have been visiting Jakarta for over 20 years, and had the opportunity to work in the Ministry of Population and Environment when Emil Salim was the Minister of Environment. From my observations, one thing that would be helpful is more transparency. There apparently is a master plan that has been around for decades for the development of Jakarta but it is not really publicly accessible. I recognise that there is a green area and then a mall starts getting built, and it is not clear what has exactly happened. With these types of occurrences we have noticed that a lot of the green areas have been taken over by development. We also notice that there is a very vocal community that point out that this is only going to exacerbate the flooding but we always have rain which lasts for several days every year, and every year the government laments the fact that it is costing so much in terms of lost revenues. We talk about encouraging people not to throw their garbage in the canals and so on, but at the end of the day the really hard decisions are not made - they are postponed. When it gets so bad that you cannot drive to the airport - and that really affects the political elite they then build that road higher, but that only makes the problem for the rural poor difficult. The water just flows off into their fields, and so on.

The integrated plan is not fully accessible; we are told that it is there but we cannot examine it or evaluate it and the NGOs cannot either. I think that a lot of "water has gone under the bridge", so to speak, and some of these things could have been done a long time ago – better late than never. There is a real need for some accountability, so whose responsibility is it?

A dam broke on the outskirts of Jakarta not too long ago and people drowned. Who was responsible? Everyone passed the buck. The local mayor said, "No, it's not our fault"; the provincial people said, "We control the land, but we don't control the water". No one took responsibility and it turned out that people had been complaining about leaks in this dam for some time. So, again, it largely comes down to governance. We know the technology; we know how much water there is. There are water engineers who know how to solve these things. They are solvable problems but the governance structures are not up to the job.

I would just like to finish that with one more example, which I think is interesting because it illustrates how the philosophy about this has changed.

I live in Canberra, and Australia is a semi-arid area. It is short of rainfall but when it rains, it buckets down and floods the creeks for example. Because of this, they built concrete canals all around the flood channels around Canberra. When the creeks flooded and the rain came down from the mountain it was necessary to get rid of that water as quickly as possible and it makes it flow directly into the lake. After 20-30 years of doing that, the lake becomes aerobic, there is too much pesticide, and the water, soil and everything starts dying. Now the philosophy has changed 180 degrees; now the channels are bad. They get rid of the water too guickly and the water, therefore, is not clean. It is better to go back to the old creeks, reintroduce the wetlands, and the water then goes down the way nature decides it should; it permeates through the soil and so forth. The water then goes into the lake which is already clean. You have the water in the wetlands and you can also harvest more of the water. The simple point is that we need to get urban planning on the side of the law, and the more we build the environment, the better.

I think Japan is a leader in this. The more you imitate nature in your urban planning, put trees on the roof and so forth, the healthier the climate is and the more climate-smart it becomes.

# [Chair]

Now that you referred to Japan, I

would like to make a few comments. In Japan we have now stopped filling and covering the creeks with concrete. We put trees on the roof to make the inside of buildings cooler, and store snow in the winter for cooling the air during summer.

Philippines, please.

#### [Mr. Ramon San Pascual, PLCPD]

Thank you very much for providing us with five links that can be useful as a policy guide for population and climate change, but there seems to be minimal attention given to rural development: on the lives of farmers, those who dwell in the upland, the fisher boats who are just as vulnerable. Populations still depend on the rural areas where they are living, so could you give a link – for that segment of the population – on climate change and the effects of deforestation?

#### [Dr. Adrian C. Hayes, ANU]

Thank you. You are absolutely right -1 had to be selective and I said nothing about the rural aspects.

This issue is going to depend so much on who we are really talking about, and where we are talking about. Some rural farmers will be affected because the monsoons will not come, or they will come and cause floods. Yes, the rural areas are going to be affected and we just have to look at it on a case-by-case basis. I do not really have a general point to make, but you are right. Even though the population is going to decline, the rural population still needs attention – that is where our food comes from.

One of the things we see in Asia, with regard to the rural population, is the way it is aging so quickly compared to the urban population. Young people leave the rural areas and migrate to the cities and the consequence is that the rural areas are becoming more and more dominated by older people; the median age is rising and those people will also be affected in certain ways.

# [Chair]

In the case of rural areas in Japan, we are seeing not only a rapidly aging population, but also depopulation.

If a rural village is becoming depopulated, there are not enough people to take care of the areas – especially forested areas. Then if the areas are badly kept, it will result in various damages such as soil erosion and flooding.

Therefore, the Japanese Government started providing subsidies to rural villages for protecting and restoring the environment, so that the downstream areas will also be protected. Japan is facing serious depopulation in rural areas and there is little possibility of the younger people coming back to those areas, so we are looking into the baby boomers who are around the retirement age to come live in rural communities to take care of the environment.

Would Lao PDR like to make any comments?

#### [Hon. Dr. Koukeo Akhamontry, Lao PDR]

My question goes to Hon. Dr. Pinit. I am slightly sceptical concerning your understanding of mitigation and adaptation. You would think that mitigation should be considered as a short term action, while adaptation is for the long term. In fact, it is my understanding that it is two kinds of activities – this can be viewed both in short term and long term. What is your view on that?

# [Hon. Dr. Pinit Kullivanijaya, Thailand]

Actually I agree with you. I think that both strategies must be both short term *and* long term. I may have misinterpreted something. What can we do as parliamentarians? I think I have talked about this many times at past conferences. When I became a senator, I did not know much about anything. I had never heard anything about MDGs, harm reduction, and so forth. But I had heard about climate, because I am interested in it.

I became Secretary-General of AFPPD and I wanted to do my job as best as I could, so I studied how to go about it. I found out that the best way to do it in the Thai system is to set up a sub-committee on population in the Thai Senate, so I did with the help of my colleagues. We set up this committee on population and development to go hand-in-hand with AFPPD. I then tried to "brainwash" and stimulate my colleagues, and they were all in accordance with the idea. Now in the sub-committee, I delegate each one to look after the MDGs.

Climate change, to me, falls under the sustainable development. We have had many hearings in the senate on climate change and we ask all the involved agencies - governmental, non- governmental, and private - to come and we try to stimulate them to get the data. I think what we could do in general is that parliamentarians should try to learn as much as we can about each topic; in this case climate change and population. We must know all the facts from the world, in our country, in our region, and then look at your own country and the system of your parliament. What can you do; where are the problems, for example, in climate change; who is doing it in your country? You must then ask them to give you the information and then you must stimulate and help them to reach the goal. The best way is first get to know the knowledge; second, know your country's system; and third, figure out where you are through the data in your country.

Each country does not have the same amount- or type of problems. I know there are issues of gender equality in Thailand, but perhaps there are many more of those issues in India. I think we should, thus, learn about the different issues and then we must try to find how to help our countries adapt and stimulate other people to do the best you can. From my own experience in Thailand in the sub-committee I think it is working well. I have had about three or four hearings on harm reduction, on MDG5, on climate change and I hope to go to more. Thank you.

# [Chair]

Next question, please.

#### [Dr. Osamu Kusumoto, APDA]

This is not a question, but rather a statement to parliamentarians.

Immediately after the APDA Meeting last year in Jakarta we went on a study tour in Indonesia. From Jakarta we went to Bandung, then to Tasikmalaya. I had a very interesting experience in the town of Bandung where I we met with an NGO which is doing very good work in the field of environmental protection. They changed and influenced the community's awareness and told people to sort the garbage; as a result, the town is getting cleaner.

At the same time, the Japanese Government invested ODA in order to dredge the river and improve the sewage of that town. Seeing these sites, a big question arose in my mind.

It was explained to us that the waterand sewage level of that river increased, which had bad impacts on the health of the people living in that town. This happened due to the population density growth – or perhaps economic reasons – and tress on the mountains were cut, which caused soil erosion and raised the river bottom. As a result, water drainage was affected, the area became susceptible to floods, and hygiene was aggravated. But when the government takes measures, they leave the forestry agency to work on the deforestation; when it is an environmental problem, they let the environmental NGO to take care of it; when it comes to a hygiene problem, the health ministry is in charge of it – the river dredging was taken care of by another agency.

Downstream of the river is the city of Jakarta, so this sewage problem is causing trouble in Jakarta as well. With climate change, the impact of such pollution is even worse. I think parliamentarians are in a very difficult position compared to government officials, because people have high parliamentarians. expectations of Parliamentarians do not always have enough information, but whenever problems occur, people will blame the politicians - that is the reality. However, as a representative of the people, as legislators and decision makers, what the parliamentarians should keep in mind is what kind of scheme they should formulate considering the overall situation.

In Bandung's case, for example, if they do not stop soil erosion through afforestation, things will – essentially – never get better. Also, the population of Bandung is outpacing the construction of drainage systems. That means they have to implement family planning and reproductive health programmes, while promoting afforestation at the same. They must ensure hygiene and that they sort the garbage.

If we leave this to the government agencies, they do their own part but they do not come up with a comprehensive approach to address these issues. They will tackle each specific problem but nobody will take a comprehensive approach. It is only the politicians who are able to take such a comprehensive approach. People will be able to exchange information and learn from experts at this meeting. Politicians will be able to gain a comprehensive view of development plans, based on the knowledge and expertise. With this comprehensive framework, we can coordinate and optimise various programmes. Such initiatives by parliamentarians will be cost-effective in the end. And we will do our best to provide useful information for parliamentarians.

#### [Chair]

Since we have time, please allow me to express my opinion.

Unfortunately the population issue is not clearly linked to climate change in Japan, one reason being that Japan is a country where we are seeing a declining population; therefore, the urgent task for the Japanese Government is how to increase the number of children.

There has been a recent change of the ruling party – I am a member of the present ruling party. The first issue that we are addressing is how to deal with the decrease in the number of children. The reason behind the low TFR in Japan is that young couples cannot afford to raise children. Therefore, the measure that we have introduced is to subsidise ¥13,000 per child as child allowance.

We started this in April 2010 and it is still in its experimental stages – we will examine if the subsidy can stop the decrease in population. Just like in the case of France, I personally think that if there is enough support for raising children, we can lessen the decrease in the number of children.

When it comes to climate change, the Japanese Government pledged a 25% reduction in CO<sub>2</sub> and is trying to come up with ideas on how to achieve this target. This is especially a big task for the industrial world; the industrial sector has been working on energy saving measures but from now on they need a drastic change in energy sources. We have been encouraging the use of solar power but doing only this is not enough. In the end, our lifestyle itself should be changed. If we continue leading our current lifestyles we will not be able to reduce CO<sub>2</sub> emissions, and if the population is concentrated in the urban areas we will not be able to reduce CO<sub>2</sub>. How can we, then, have an economic structure in which people are willing to live in rural areas? That is what our government is working on.

Everyone knows that there are bad impacts when too many people are concentrated in one city. But in reality, those living in rural areas often have difficulties in finding a job and so they move to big cities. However, thanks to the progress in IT communications, those living in rural areas now have better access to the job market. We are thus trying to promote decentralisation so that it will be easier for people to live in rural areas.

You may not be facing these types of problems that Japan is facing now but it could be possible that you will face these problems in the future.

I would now like to close this session. Thank you very much for your attention and cooperation.

# SESSION 3 Adaptation to Climate Change for Smallholder Farmers

## <u>SESSION 3</u> Adaptation to Climate Change for Smallholder Farmers

How Farmers can Participate in Reducing the Impacts of Climate Change

**Dr. Vo-Tong Xuan** Professor of Agronomy; Rector Emeritus Angiang University, Vietnam

#### [MC]

We would now like to start the second day of this meeting with the third session, entitled "Adaptation to Climate Change for Smallholder Farmers".

Our Chair will be Hon. Prof. P.J. Kurien. Honourable Kurien was a previously a professor of physics, and he was a Member of the Lower House of India for 20 years. He has also been the Senior Minister for Industry, and the Senior Minister for Non-Conventional Energy Sources for two terms. He is currently the Chief Whip and Chair of the ruling party in the Upper House of the Indian Parliament.

#### [Hon. Prof. P.J. Kurien, India]

We have come to the third session and the topic is "Adaptation to Climate Change for Smallholder Farmers: How Farmers can Participate in Reducing the Impacts of Climate Change".

Our resource person for this is Dr. Vo-Tong Xuan, Professor of Agronomy and Rector Emeritus at Angiang University, Vietnam. He was born in Vietnam, and obtained both his Bachelor's and Master's degrees in Agricultural Chemistry from the University of the Philippines and he has a Doctoral degree in Crop Science from Kyushu University in Japan.

He was a Member of the National Assembly of Vietnam and is currently a board member of numerous organizations, including the Rockefeller Foundation and the Asian Institute of Management. He has received high civilian and scientific Honours from the governments of Vietnam, Australia, Canada, France, Japan, and the Philippines.

Dr. Vo-Tong Xuan, we are fortunate to have you for this session. I request you now to give your lecture on Adaptation to Climate Change for Smallholder Farmers. Thank you.

[Dr. Vo-Tong Xuan, Angiang University] Ladies and Gentlemen, this morning I am going to deal with population issues, with a focus on farmers.

Of course, there are both female and male farmers. In my country they constitute the biggest group of the population in Vietnam. If we can educate our farmers on how they can contribute to lessening and mitigating the effect of climate change, I think we can then do a lot – parliamentarians can have a lot of influence on policies.

Some of the information I am about to present has already been mentioned by the speakers before me at this meeting. For example, climate change can be observed now by the increase in the global average of air temperature and the oceans' temperatures – we are feeling this, as well as the wide-spread melting of snow and ice. This has all been proven by satellite imagery and also by the report of the IPCC.

The effects of climate changes are evident in the wide spread flooding in the wet season. It can be seen very clearly in countries such as Cambodia, Vietnam, Thailand and Bangladesh. It is also evident from the serious droughts we have experienced in many countries, like now here in Lao PDR. Last month, in fact, there was a period where people could cross the Mekong River from Vientiane to Nong Khai – the drought is very severe.

The biggest worry is the rise of the sea level. This is going to be very disastrous if we do not take care of this.

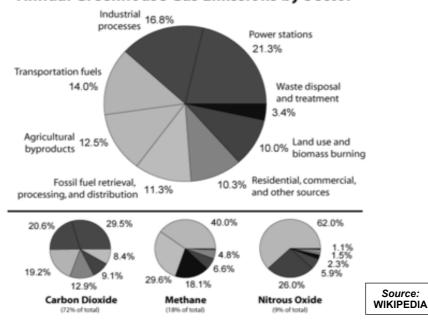
According to the Bangkok Post on 23 March 2010, Chinese Premier Wen Jiabao went to Yunnan which is upstream of the Mekong system. China has put 11 dams there so that they can regulate water flows. The plan was that the dam could release water during the dry season, and hold water during the wet season so that there was less downstream flooding. The reality, however, was that the dam could not release water during the dry season because the dams themselves were actually dry. This had effects all along the Mekong River regions.

The effects of climate change are real. The IPCC submitted a chart to Wikipedia on annual greenhouse gas emissions and the how they are created by sector (see figure below).

The "agricultural byproducts" and "land use and biomass burning" fractions are created by the farmers.

Climate change is made up by the three main greenhouse gasses: Carbon Dioxide  $(CO_2)$ , Methane  $(CH_4)$  and Nitrous Oxide (N<sub>2</sub>O). We can see from the small charts that CO<sub>2</sub> from "land biomass burning" use and only contributes 9.1% of the emissions, which is not that much really. Agricultural byproducts, however, are the biggest contributors to the emissions of methane and nitrous oxide. This means that anyone in the agricultural sector will create more gasses that go up into the air, which in turn creates climate change.

Now, methane and nitrous oxide – how do they compare? According to the IPCC, methane is 21 times more dangerous than carbon dioxide; nitrous oxide is 310 times more dangerous than carbon dioxide. So, if we can educate the farmers to not release methane and nitrous oxide into the air, we can then see that we could save our earth, much more than we do with the industrial sector.



#### Annual Greenhouse Gas Emissions by Sector

I spoke to the Chair of the IPCC, Dr. Rajendra Kumar Pachauri, about some of the figures on global temperature. It has continued to take the upward trend since 1850. Now the global average of the sea level is also on an upwards trend; snow cover is on a downwards trend. That means that all this will lead to climate change.

In terms of vulnerable communities and regions, Africa, Asia and Latin America have historically been most at risk, and they will suffer the greatest impacts of climate change. And this change – as we heard yesterday from other speakers – will bring with it endemic poverty, limited access to capital, ecosystem degradation, disasters and conflict, and failure of the government systems to respond effectively.

The urban areas are also vulnerable. We see that the world's population growth will take place mainly in the city within the next several years – largely in Asia and Africa where they will flock to the cities more, rather than staying in the country side. The urban population from 2000-2030 will increase, increase from 79% to 87% in North America and 37% to 54% in Asia; 54% of the world's urban population is expected to be in Asia. We can safely say that we cannot stop urbanisation, but they will become high risk areas.

There is a figure from the IPCC that shows where there will be extreme, high, and medium impacts on the coastal areas around the globe (see figure on page 84).

Some of the coastal settlements that will be most at risk are along the Mekong Delta, the Ganges and the Nile, where the sea level rises will have grave effects and affect millions of people. More people are projected to be subject to floods every year; they will be displaced and also their agriculture will be affected very severely due to sea-level rise by the 2080s. The largest number affected will in the Mekong Delta region of Asia.

The significant loss of the coastal ecosystem will affect the aquaculture industry. Agricultural productivity at low latitudes will be affected by high temperatures, by floods, by droughts, and also soil degradation.

The yield reduction has also been predicted by the IPCC. They have estimated that the yields will be reduced by 50% by the year 2020 in some African countries; reduced by 30% by the year 2050 in Central and South Asia; by 2080 the yield will be reduced by 30% of what we have today in Latin America.

We must also pay attention to – especially in discussions within our fora – one of the most limited natural resources: water. Water availability will significantly affect the supply for human consumption but also agriculture and energy generation. Because there are changes in precipitation patterns, rain will be very uneven and the salinity of river water and groundwater will then increase.

The range of people exposed to increased water stress by 2020 could be:

- 120 million to 1.2 billion in Asia
- 75 to 250 million in Africa
- 12 to 81 million in Latin America

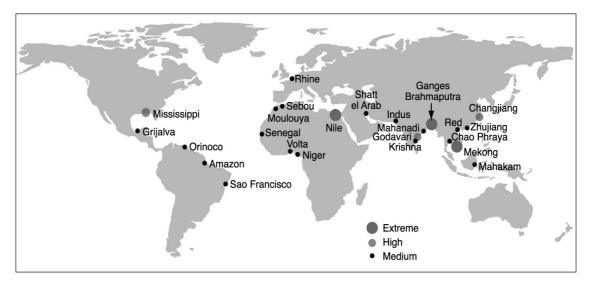
Regarding the impacts on human health, we could expect:

- Increases in malnutrition and consequent disorders
- Increased burden of diarrhoeal disease
- Exacerbation of abundance and toxicity of cholera due to increases in coastal water temperature
- Increased deaths, disease and injury due to heat waves, floods, storms, fires and droughts
- Increased frequency of cardio-respiratory diseases

# Impacts on coastal areas

*Source:* Dr R K PACHAURI, Chairman, IPCC

# **Coastal settlements most at risk**



Dr. Pachauri, IPCC Chair, has been evaluating adaptation:

- Adaptation is necessary to address impacts resulting from the warming which is already unavoidable due to past emissions
- Adaptation is taking place through a range of practices
- Adaptation capacity is limited and uneven across- and within societies
- Climate change poses new risks that will require new investments in adaptive responses

We have to know what the dangers are in order to be able to empower ourselves to be able to adapt.

Adaptation strategies that have been discussed are, for example, enhancing social capital. This means empowering the different sectors of society; empowering women, farmers, the youth and so on, so that they will have the education to be aware of what they are doing and what they should do in order to adapt.

We must also create protection from the sea level rise which is going to be very costly, especially for the three main deltas. The agricultural adaptive capacity must be increased. Agriculture needs to be redesigned so that it can adapt to the new situation, as well as preventing water scarcity by knowing how to use water efficiently.

The key need is to incorporate adaptation into development policies and practices, and these main principles need to be noticed by the parliaments of every country.

How are farmers contributing to the present global warming? Firstly, there is the way the land is used. Many farmers are cutting the mangroves to make streams for irrigation. Because many of them are so poor, they cannot find another source of income other than cutting the forest. Cutting the forest is producing more  $CO_2$  because there is not any more foliage to absorb the  $CO_2$ .

Secondly, there is the extensive rice growing. The more we grow rice without modification, the more we produce methane which gets emitted into the air. Several economists are now telling farmers in Vietnam to decrease the amount of rice that is being exported in order to lessen their contribution to climate change. The rice farmers, however, are poor and need to grow rice for their livelihood. How, then, can we grow rice with less emissions of methane and carbon dioxide?

The third way that farmers are contributing to global warming is through the raising of livestock. This also produces more emissions because the manure of the livestock eventually becomes methane.

Regarding agricultural technology, many farmers want to have high yields thus they use a lot of fertilizer, nitrogen fertilizer. Studies from the International Rice Institute in the Philippines show that the rice plant only uses around 30-40% of what the farmer puts into the soil. The majority of the fertilizer is lost through evaporation and eventually becomes nitrous oxide this nitrous oxide is very dangerous. It is wrong agricultural practice but many farmers are doing it.

The use of fossil fuel is also a main contributor. Gasoline and diesel oil are usually used to run electricity, engine generators and pumps, which also produce carbon dioxide emissions.

We still, however, need quantitative data. But this is very hard to get in some countries as, say, Vietnam because there are not enough financial resources to analyse those who deforest or how much carbon dioxide we contribute to the air.

Sometimes US\$10 million is needed for an experiment that only lasts around one year, so although we still need the precise figures and quantitative data, there is not enough money to carry out the research. There is also the practice of burning – burning straw, for example. A study in India on a programme called the Rice-Wheat Cropping System (RWCS) analysed how much methane and nitrous oxide is being produced by burning straw in order to plant wheat crops after harvesting the rice. One hectare of this burning will give 110 tons of methane. This is very dangerous and we should address this practice and help the farmers to stop doing this.

What are the impacts of climate change on agriculture? When the temperature increases, crop yields may be affected adversely. The flowering of plants will be affected and afterwards the flower and young fruits will be affected by the higher temperatures. An increase in air temperature also means an increase in insects and diseases.

Agriculture will also be affected by the changes in water levels. Floods will become more frequent during the rainy season, which will affect the yield. There will also be salinity intrusion further inland, especially in the delta areas such as Vietnam, the Nile and the Ganges. In a 2008 IPCC report, it is predicted that by the year 2100 – which is very far from now – the sea level rise will be between 19-59 centimetres, or even 100 centimetres, depending on where.

How can we be resilient to the impacts of climate change? Do we need to reduce rice production; do we need to reduce the raising of livestock? No. What we have to do is think about adaptation and mitigation strategies and have international collaboration in order to make adaptation and mitigation happen.

What is resilience? Resilience is the ability to withstand or accommodate stresses and shocks to a system while still maintaining the system's function.

Some of the shocks and stresses arising from climate change are:

- Temperature rise is leading to drought, water scarcity, heat waves
- Increased rainfall leading to flooding
- More intense storms and cyclones destroying lives, property and livelihoods
- Sea level rise resulting in storm surge and flooding

In terms of adaptation to climate change, one of the first things we could have as a policy is to create incentives for people who live in the coastal areas to reforest. Reforestation of the coastal mangroves and conserving their biodiversity will not only conserve the biodiversity of it but will also enhance environmental resilience, reduce national contributions to climate change, and provide valuable community assets. It could provide tourism resources and even saleable pollution offsets via CDM schemes. If we can get just that one policy to recover and reforest the mangroves, then we have achieved a lot of components to mitigate climate change. We can then also get the income from tourism. A lot of mangrove areas now have been turned into tourist areas that attract a lot of people.

Policymakers should provide better farm infrastructure and research facilities. Why? Because we must have the areas which have dikes, so this is the only development we can do. With empoldered areas we can grow valuable fruit trees replacing rice, and with fruit trees we will lessen the methane emission, increase capacity for CDMs and the absorption of carbon dioxide. When we select good species of fruit trees the farmer can gain more income than they would with rice.

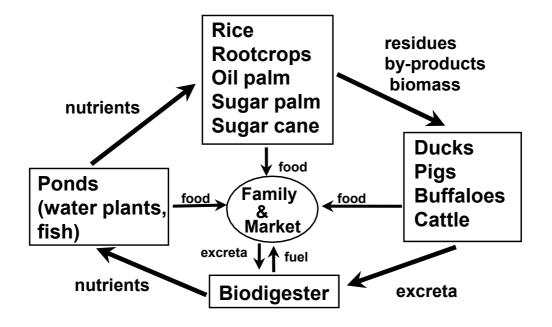
Flooded areas are very vulnerable but we could also use those to construct empoldered residential areas; for example along the Mekong Delta in Vietnam, the government has a policy on residential clusters.

Policymakers should also provide better funding for research facilities. Why? Because we need to breed new, different crops of rice, for example. With the "new" rice we would have to look, for example, at what can tolerate salinity intrusion, so the new rice should have a salinity tolerance gene. We also have to breed crops for tolerance to heat, submergence, and to be resistant to new species of insects or diseases that can occur; therefore, resource facilities must be provided. I know that in many countries the budget for research – especially agricultural research - is decreasing and I think the attention of parliamentarians in all countries should be drawn to this.

The research should mostly be done to help come up with an integrated farming system. An integrated farming system here will give us a very clean environment.

Agricultural families look up to the market and its demands in order to respond to it. Depending on the market the land can be used to grow rice, cassava, or sugar cane, etc. The first thing the family would do is to grow a crop that is suitable for this land and also respond to the market. The residue from those crops can then go to feed the animals. The animal would eat the residues and their excreta will go into the biodigester. This biodigester will give methane gas for the family to cook or to run the refrigerator. The nutrients of the biodigester will be organic matters like organic fertilizers to put into the pond, to raise water plants for the fish. From this pond the water can be pumped up to provide irrigation for the crops. With this type of integrated farming system, nothing can be turned into methane or nitrous oxide.

# The integrated farming system



Now I would like to come quickly to mitigation methods. I would like to request you to remember mitigation measures that the rice farmer can use and you can tell them. Rice farmers should stop over-fertilizing and apply balanced fertilizer. Balanced fertilizer means that it contains nitrogen, phosphorus, and potassium (NPK). We have also designed leaf colour charts. These charts can measure the colour of the leaves to know when they should apply more fertilizer and when to stop fertilizing so that they are not going to over-fertilize.

Then we have to apply safe pesticides. There are many unsafe pesticides at the moment and using those would cause even more trouble on the environment.

Then the rice straw has to be gathered. The farmers can use the straw to grow mushrooms. When farmers in Vietnam tried this, they were able to gain an income from the straw mushrooms of around US\$500 per 1000 square metres in one month. It is very profitable and at the same time they can return the depleted straw into the biodigester and it composts it into fertilizer.

Water also needs to be used very efficiently. We have a tool designed by International Rice Research the Institute that gets put into the soil. This is about 40 centimetres long and is pushed into the field. And the farmers make sure that the water is up to about 5 centimetres. When the water level goes down to about 1.5 centimetres, it is one of the critical levels where they should put water back. So that means they do not need to keep water 5 centimetres above the field all the time, which is very costly, and it is a very wise way to control the water.

The other use of the rice straw is feeding it to the livestock. We could provide livestock with many new different types of feeds which are very nutritious and not harmful to the environment. *Stylosanthes Guianensis* can grow very thick and the cows and water buffalos like it very much. Farmers can also gather *Gliricida Sepium* and feed it to the cows very effectively, or they can use cassava leaves and sweet potato leaves to feed the animals – in Vietnam we use the sweet potato leaf to feed our pigs. Duckweed is very good for feeding ducks and water spinach is also very good feed for our animals. *Moringa Oleifera* is a famous plant and abundant everywhere, especially in the Philippines. This has now found to be a very precious feed for the animals. Of course, the jackfruit leaf is also another source of feed. When we raise animals, we will feed them with those leaves and use the excreta in the biodigester.

My last point is on international collaboration. Many countries use diesel and coal to generate power, which is very dangerous; it has a lot of greenhouse gasses emissions. If we can help to find a carbon-friendly, nuclear, renewable, and perhaps clean coal

power plant, it would be very good. Reforestation and the production of clean refrigeration equipment are also very important.

The more developed countries would need to help the developing community to put things into practice, but it can be done.

Ladies and Gentlemen, that is what I would like to convey to you. I hope this is useful for your reference when you work with your contingencies, especially farmers. You have some data, some ways to advise them how not to pollute the air with greenhouse gasses in order to protect the environment and to stop the impacts of climate change.

Thank you very much.

# SESSION 3 Discussion Chair: Hon. Prof. P.J. Kurien

MP, India;

Vice-Chair, Asian Forum of Parliamentarians on Population and Development (AFPPD); Chair, Indian Association of Parliamentarians on Population and Development (IAPPD)

#### [Chair]

Thank you very much, Dr. Vo-Tong Xuan, for your informative presentation. It is very effective and very useful. We will benefit from it very much.

We have now come to the discussion time, and will first give the floor to Lao PDR.

#### [Hon. Dr. Boungnong Boupha, Lao PDR]

My first question is whether it is possible to promote the recycling of materials using the "3R Initiative": Reduce, Reuse, Recycle.

My second question is how can we incorporate and promote adaptation strategies in health policies and practices?

#### [Hon. Ly Son, Cambodia]

I believe that Dr. Vo-Tong Xuan's valuable presentation will help to contribute to creating more interest in smallholder farmers. I agree with the professor. When our farmers are well educated and well informed they could become the driving force for reducing greenhouse gas emissions, especially by using organic fertilizers. Since the first World Climate Change conference in 1979 up until now, we have seen that poverty has been slightly reduced but our smallholder farmers are still facing difficulties.

In the year 2009 Cambodia suffered from floods, droughts, and hurricanes. But thanks to the right policies and measures of our government, most of the smallholder farmers could overcome food shortage. As I mentioned, farmers are the driving force for contributing to reducing greenhouse gas emission. This reminds me of my mission in 1983, when I was working at the grassroots level. I saw this as an opportunity to encourage our farmers to plant trees, or at least three plants, per each family. Today, our Royal Government celebrates the annual "Tree Planting Day", presided over by our King, Head of State or Prime Minister. A million small trees are planted in Cambodia, especially mangrove trees in Koh Kong province.

Dr. Vo-Tong Xuan's presentation could be a foundation for how to overcome some weaknesses that remain in our country. When I return to Cambodia after this conference I will report on this to the National Assembly, Senate and Government so that our top institutions make effective policies in order to contribute to reducing climate change and for the profit and interest of our Cambodian people.

#### [Chair]

Yes please, Malaysia.

#### [Hon. Abd Rahman Dahlan, Malaysia]

It seems like the farmers are not only the victims of the climate change but also contributors to climate change.

Farmers are interested, especially in the third world countries, in the short term gains: how to provide for their family and to put food on the table. Even in Malaysia, for example, the open burning of straw is widespread and it is quite difficult to educate the farmers on this practice. Could the professor put into this what specific actions are there that need to be taken in order to ensure that farmers comply with what you have been telling us? Is it legislation; more rules; punitive action? Thank you.

#### [Hon. Avinash Khanna, India]

I come from the state of Punjab in India, which is the agriculture state. As you said, it is not possible for the farmers to stop growing rice. But the Punjab Government has a fixed period to sow crops; if anybody sows rice before that season he is prosecuted. Whenever a farmer burns straw, he is also prosecuted in Punjab.

This is just for your own information. I am sharing the steps taken by the government to lessen climate change.

[Dr. Vo-Tong Xuan, Angiang University]

Firstly to the Lao MP on how to use the 3R Initiative – I think it is possible for the agriculture sector to use methods such as an integrated farming system that I presented, where everything is used and not left anywhere. But what is left to be reused are the containers of fertilizers and pesticides. According to regulations of good agricultural practice, these bottles and containers should not be used in the house. They should be disposed of or returned to the manufacturer. As for the bags, like fertilizer bags, they can be used in many ways.

In Vietnam, for example, every part of the fish is being used in fishery. After they get the fillet, the skin is sold to restaurants for frying and people eat that as an accompaniment to beer. The intestine, head, and other internal parts are given to the crocodile farms for the crocodiles to eat.

Your second question was on how to integrate adaptive strategies into legislation and the health strategy. We can see that depending on the different activities in the farm. We look at the effect it has on health, then we suggest the adaptive strategy that should be incorporated. Take one example: if a farmer uses pesticides without precaution, we should tell them they will be fined, or something equivalent, if they use pesticide like that.

The one difficulty with our farmers in Asia is that they are mostly people who are not educated or do not have a certificate and thus revert to farming. In the United States and Europe, farmers must have a certificate; they must graduate from an agricultural training programme in order to be able to be licensed for farming. When they undergo the training, they immediately know that they cannot use certain chemicals.

It is also attached to income tax. The government could make regulations and say, "Use 2 litres of this pesticide and 4 bags of fertilizer on 1 hectare of land." If the farmer declares the tax at the end of the year and there is proof that the farmer has used more than the maximum, they could be fined.

I have studied the farming system in Denmark. They follow this type of government legislation very strictly and can only do what the regulations have prescribed – they cannot do just as they please.

Secondly, thank you very much to Cambodia for their insight, and to the MP from Malaysia for his question.

I know that there is currently a labour shortage in Malaysia. With labour shortage, it is very difficult to practice this utilisation of straw for animal feed. One thing you can do is establish a partnership with a livestock raiser in Japan, because I know that livestock growers in Japan import straw and hay from the United States. They need it, so in this case you only have to invest in the baling machines and get good output. If you see this straw as a commodity, like an export good, then they will be interested in doing it, otherwise they have no interest in making use of the straw.

#### [Chair]

Thank you very much to Dr. Vo-Tong Xuan for this session and your very informative, useful and educated presentation; and thank you very much to all the honourable MPs who have put in a question.

I think Dr. Vo-Tong Xuan has explained to us very well how farmers are

contributing to climate change, how climate change is adversely affecting and impacting agricultural production, and what more to do to mitigate climate change.

I think we have been fully educated on this subject. It reminds us of our responsibility and the responsibility of the nations to act in an emergency way to mitigate the adverse effect of climate change on agriculture, otherwise our future is going to be doomed.

Thank you very much again.

# SESSION 4 PANEL DISCUSSION;

# **Concrete Measures to Combat Climate Change**

#### **SESSION 4**

## Panel Discussion; Concrete Measures to Combat Climate Change

Panellists:

Hon. Dr. Ty Phommasack MP, Lao PDR Hon. Dr. Nguyen Van Tien MP, Vietnam Hon. Song Fatang MP, China Hon. Dr. Rajendra Prasad MP, New Zealand

#### [MC]

We would now like to start our fourth session which is the Panel Discussion on "Concrete Measures to Combat Climate Change". We have four speakers today and our Chair is the Honourable Dr. Tan Seng Giaw from Malaysia.

Honourable Dr. Tan Seng Giaw has been a Member of Parliament since 1982 and is now the Deputy Chair of the Malaysian Parliament Public Accounts Committee.

He is dermatologist, and whilst at medical school at Leeds University in Britain, AFPPD Secretary-General, Hon. Dr. Pinit Kullavanijaya was his senior.

#### [Hon. Dr. Tan Seng Giaw, Malaysia]

Ladies and Gentlemen, we have now four distinguished speakers to try and let us know what concrete measures we can take to overcome the climate change.

The first is the Honourable Dr. Ty Phommasack from the Lao PDR. Honourable Dr. Ty Phommasack received his PhD in Agricultural Science and has been the Deputy Minister of Agriculture since 2002.

He is the Member of Parliament from Constituency 13 of the Lao People's Democratic Republic.

Hon. Dr. Ty Phommasack, please go ahead.

#### [Hon. Dr. Ty Phommasack, Lao PDR]

I would like to talk about impact mitigation in the agricultural sector, on behalf of the National Assembly of the Lao PDR.

First, I would like to give you an overview of our country's agriculture and forestry sector. As you may know, the Lao PDR is one of the poorest countries in the world. And among the total of 6.5 million people, almost 30% of that number live under the poverty line. Lao PDR suffers from a serious nutritional imbalance; most of the food consumed by the majority of our people is not sufficiently nutritious.

Our rice accounts for over 55% of our own food. The main source of protein that is consumed by the majority of people comes from general resources such as fish and wildlife. The sector is closely attached to the use of natural resources which engage more than 80% of the people who live and depend on the sector for their livelihood activities. That sector also plays a key role in national economic sectors and structures, and covers a half of the total GDP.

Generally the agricultural production system is in a transition period from subsistent to commercial production. The short and long term vegetable and commercial crop production are significantly increasing both in the area and products. Eighty percent of the areas used for producing vegetables, fruit trees and commercial crops account for more than 90,000 hectares.

Our rice production is still considered as our national priority. The current areas of paddy fields are approximately 650,000 hectares.

The expanded irrigated areas have contributed increased to rice production, which can secure self-sufficiency. In Lao we have some surplus in rice production. Despite the above efforts, it is generally estimated that the rice field production is still low. Only 60% of large and middle-sized of plains are in the southern and central part of Laos that have been used for rice cultivation. Most of the rice cultivating areas are in infertile soil and have been used for a very long period of time without nutrients. It is in so far that many global areas burn the rice straw after harvesting which could lead to the deterioration of soil. Moreover, up to 30,000 hectares of paddy fields are also being destroyed by natural disasters such as floods, droughts and pests, including the infrastructure and irrigation system.

Livestock production has been growing significantly. At the present there are around 1.2 million heads of buffalo and 1.4 million heads of cattle, as well as other animals. Currently it seems like there are not enough grazing areas due to the condition of the pasture land and into commercial crop plantation and others forms. The impact of outbreaks of diseases is one of the factors which contributes to slow growth of the sector – despite the potential of the plantation of varieties of grass, it is still limited.

Fish raising activities have been slightly increased. Fish are raised in ponds and natural rivers but fishing in natural rivers has not been strictly managed and controlled. In the future this may threaten the extinction of endangered fish species.

The resources have also played a key role in supporting sustainable livelihoods, especially during the period of food shortage. As you may be aware, for us it has significantly contributed to a lot of national household incomes. It also provides a large portion of the employment rate.

So far, the forest cover dramatically declined from 68% in the year 1960 to 41.5% in the year 2000. I am precise on this decline in the forest. This indicates that the density of abundant forest resources is being deprived. Despite the fact that Lao PDR increased the species of flora and fauna, including birds and fish, now more than 200 species are vulnerable and threatened.

The expansion of urban and residential areas, industrial zones, the construction of hydropower dams and infrastructures, mining activities, illegal logging, and collection of multiple forest products is threatening the environment. A key factor is that this directly contributes to the decline and deterioration of the forest area and resources.

The other pressing factors could also be that there is more demand on wood and other forest products for consumption, as well as an increase in demand for land use. However, the enforcement of laws to manage the forest is still limited.

Based on the abovementioned issues, it is important to ensure the security of environmental soundness and for households to have access to food with sufficient nutrition, increased income and better livelihoods.

The first great challenge is to maintain the rest of the forest area by raising the awareness of people to recognise the value of forests, forest resources, and conservation of the ecosystem. Now I would like to talk about the greenhouse gas impact and the climate change trends in the agriculture and forestry sector. In comparison to many other countries, the Lao PDR still emits low levels of carbon dioxide. Back in the year 1990 a survey indicated that the national agricultural and forestry sectors emitted greenhouse gas at the highest level, at about 95%. The agriculture sector contributed around 20%, while forest and land use around 70.6%.

The emission from agricultural resources came mainly from rice plantation, and livestock emission was mainly from too much emission of animal dung. The burning of biomass agriculture took place in many areas. The last percent of emission sources from agriculture is methane, with less nitrous oxide. At present it is estimated that greenhouse gasses will increase much more compared to the survey we conducted in 1990. This is due to the fact that rice land areas are being cultivated during both the wet and dry season and the number of livestock will continue to increase.

The cities are also emitting greenhouse gasses and vulnerable to climate change, especially seasonal flood and drought that occurred in interval years and in the same years. That incident caused more serious damage in the agricultural and forestry sector.

To respond to- and be prepared for the problems, it required that the sectors adapt properly to adaptation measures; so, now I would like to go directly to general climate change adaptation measures.

The following are options for acting within the agricultural and industrial sectors in response to climate change:

1. Integrate the climate change management in policy strategies and action plans in the sectors by bringing the issues of climate

change into all planning and design processes of an investment programme

- 2. Increase productivity per unit land by promoting cost efficient agricultural measures, as Dr. Vo-Tong Xuan mentioned already
- 3. Research and select developed seeds, and start animals to adapt to new climates and become resilient to pests
- 4. Instant flood control system and extend the irrigation system and maintain of infrastructure, food security, disaster; and conduct studies at the sectarian, village and national level on the vulnerability risk impact and offset in adapting to climate change

Lastly, I would like to talk about the mitigation measures.

- 1. Ensure systematic land use planning for all of us
- 2. Improve and extend carbon sink areas in the agriculture sector resource emitters, and identify water saving measures and food energy saving in the production system
- 3. Develop and improve the transfer of checking and systems of rice plantation that could last and reduce greenhouse gasses
- 4. Continue to increase forest coverage to 65% by the year 2015 and 70% by the year 2020
- 5. Strengthen forest management systems, and emphasise efficiency protection and sustainable use of forest resources
- 6. Reforest the degraded areas to increase forest coverage and raise the absorbing capacity of carbon dioxide
- 7. Increase capacity in the implementation of strategic goals and international cooperation
- 8. Develop forests in combination with other development sectors in order to avoid the destruction of

forest resources and reduce the impacts on the climate

 Increase efficiency of wood energy in order to reduce the use of firewood and charcoal at household and industrial levels, and collaborate with the energy sector to promote firewood plantation

Thank you, Mr. Chair.

#### [Chair]

The next speaker is from Vietnam, Hon. Dr. Nguyen Van Tien. Hon. Dr. Tien graduated from Hanoi Medical College and received his PhD in Public Health. He spent some time in India examining population issues, and he is the Vice-Chair and Secretary-General of the Vietnamese Association of Parliamentarians on Population and Development (VAPPD).

#### [Hon. Dr. Nguyen Van Tien, Vietnam]

I would like to discuss some of the concrete measures that we, as parliamentarians, can take to deal with climate change.

According to the population census last year, there are more than 85 million people in Vietnam; 29 million people are living in the urban areas.

On maps you can see that Vietnam is situated on the ocean with a long shape – we have a coastal line of more than 3,000 kilometres which means that Vietnam will be seriously affected by the rising sea levels. There are 40,000 square kilometres of lowland in Vietnam which is inhabited by 20 million people. When there is a rise in the sea level, it will seriously affect them.

Every year Vietnam exports more than 5 million tonnes of rice. Not only does this provide rice for other countries, but it also ensures food security for the rest of the world. The economic growth rate in Vietnam has been relatively stable and increasing over the past 15 years – even during last year's economic crisis it still reached 5%. This means that there has been more industrialisation and urbanisation in Vietnam.

The fertility rate of Vietnam has decreased over the past 20-40 years because we have introduced a policy to try to stabilise the population and reduce the total fertility rate (TFR). We reached the fertility replacement rate around 4 or 5 years ago and we now almost have stable population growth. Even if the growth rate is very slow, the total number of the population will, however, still increase due to the young structure of the population.

With regard again to the over 20 million people on 40,000 square kilometres of land and rising sea level, they will suffer several effects such as seashore erosion – especially salt penetration into the soil. There will also be receding land and decreased farming which means less agricultural production and fresh water for living.

One of last year's storms hit the central and upper parts of Vietnam, but also affected the ecosystem of the coastal area and the residential areas along the sea. There have been more frequent and unusual disasters that have been happening recently in Vietnam, which will spoil development achievements – including the achievements of the MDGs; especially MDG4 and MDG5 concerning population and reproductive health.

The regions that are facing several effects in Vietnam are the north, centre and the coast, as well as the Red River Delta and Mekong River Delta. The sectors that will be most affected in those areas are agriculture and public health, which in turn will affect the poor in rural areas, the disabled, and women and children. Over the past two years dengue fever, for example, has increased by 2-3 times but it used to be very unusual in Vietnam. Even cholera broke out in Ho Chi Minh two years ago.

Over the past 10 years the sea level has been rising unusually fast in Ho Chi Minh. Some reports have stated that the sea level rise is higher this year than last; last year it was one metre; this year it is 1.5 metres and more frequent flooding has been occurring in Ho Chi Minh.

In terms of adaptation to climate change, I think we have measures coming from the parliament side, from the government side and from the community side. Our function here at this conference is to look at what can be done from the parliament side.

What is the Vietnamese Parliament doing to deal with climate change? Firstly, Vietnam ratified the UNFCCC in 1994 and the Kyoto Protocol in 2002. We have also approved other laws and measures for dealing with climate change:

- Law on the Protection of the Environment (29/11/2005)
- New version of the Law on Forest Protection and Development (2004)
- Biodiversity Law (2008)
- Law on Gender Equality (2006) (including measures to empower women socio-economically)
- Electricity Law (2004)
- Law on Effective Energy Utilisation
- Resolution for the plantation of 5 million hectares of forest
- Approved budget for strategies for dealing with climate change
- Monitoring of activities

The electricity laws also relate to hydroelectric power dams. The approval of the Law on Effective Energy Utilisation is quite significant because it means that we will change the pattern of how we use energy. The resolution for the plantation of 5 million hectares of forest was approved by the parliament around 10 years ago and special resources have been allocated for that. It is quite unique and a lot of money is being spent for research within this field.

What can we do in our parliaments to ensure that these actions are continued? I think it is very important that we advocate much more on climate change. In Vietnam we carry out a lot of seminars on climate change and connect it to the field of population and gender issues, for example, or science and technology to see what all the different sides are. We should also carry out field monitoring on the effects of climate change, as well as collecting lessons learned and experiences from other countries. It would be useful to set up a group of councillors. consultants and technical experts to help MPs with exact information on population and gender issues in climate change.

But what is the challenge? I think there are very big challenges on climate change for our parliament because in Vietnam only 5-10% of people really know about it and maybe only 20-30% of MPs; that is why we should have more advocacy meetings and educate people, including policymakers. If more advocacy is carried out, then awareness and curiosity will increase; if it is not then knowledge, understanding and support will be low.

Another challenge is that we lack concrete and evidence-based information. Yesterday I saw on the Internet that a report was published by 40 famous scientists from around the world. The report stated that the resources for information that are being used for the IPCC are coming from unreliable sources and that only eight out of the 44 chapters of the 3,000 page report are "highly" reliable – it means that most of the chapters are unreliable, so the world is worried about the quality of the report.

Some scientists are also worried about the reliability of resources of the WHO report on the N1H1 flu. Some countries in Europe have appealed to the courts about whether the information given is true or not.

Other issues worth considering are the weaknesses in coordination to deal with climate change and the lack of resources for emissions policies and implementation strategies for dealing with that. Based on that information we have come to some conclusions.

Although Vietnam is still considered a low emissions country, it is one of the five countries most severely affected by climate change.

As previously mentioned, nearly 6 million tonnes of Vietnamese rice are exported every year at the moment, but this could be affected by climate change and, therefore, have an effect on global food security. It will also have an effect on the 20 million people who live in rural, agricultural areas who produce rice for export. Vietnam is facing an increasing rise in sea level, as well as more natural disasters and floods, even when it is not the rainy season.

To deal with the effects, the Parliament of Vietnam has approved a number of laws in preparation for adapting to climate change; including measures to stabilise the population, reproductive and gender equity. health, The Parliamentary Committee for Social Affairs, the Committee for Foreign Affairs, and the Committee for Science and Environment have all conducted a number of seminars on climate change so that there are different perspectives on how to deal with climate change in different areas.

would like L to make some recommendations: the first is to do more advocacy activities on climate change for MPs. It took a long time -40 years, in fact - to come to a consensus and promote family planning and population stabilisation. We have only just started talking about climate change and we cannot let it take as long as 40 years again for the world to come to a consensus on what to do about it. Things are different nowadays than they were 40 years ago. We have more communication and advocacy means, thanks to the internet and other modern technology. Hopefully the measures to combat climate change can be exchanged and implemented more quickly.

We also need more evidence-based information on climate change – in this respect, population and gender must be considered for gender equity and population stability.

We should also make more fora or caucuses for MPs. More consultative climate change groups in nations and regions will also help our MP colleagues, as well as multi-sectoral, regional and international roles so that we can cooperate with international MPs from developed countries who have- and can help us – this is very important.

I would like parliamentarians to please think about climate change when passing laws such as:

- Economic laws, such as those on land management; forestry; environment; energy and electricity (hydro electric power); labour; consumption; fishery; and water
- Laws on construction, transportation (building in the coastal region, and low lands)
- Laws on public health regarding population, communicable diseases; support for stable population
- Laws on gender and social issues: domestic violence; gender equity;

family and marriage

 Laws and measures for emergency situations such as natural disasters and calamity

In conclusion, as Asian parliamentarians involved in our field, I believe it is very important that we focus on the laws regarding public health and the laws on gender and social issues and all push for the support of our parliaments on population and development issues.

Thank you.

#### [Chair]

The next speaker is from China, Honourable Song Fatang. He is a member of the Standing Committee of the National People's Congress of China. He is also Vice-Chair of the education, science, culture and public health committee.

#### [Hon. Song Fatang, China]

China is a developing country with a large population, low level of economic development, complex climate conditions and a fragile ecological environment. China is especially susceptible to the adverse impacts of climate change. Climate change poses a real threat to China's natural and ecological system, as well as its economic and social development. Adaptation to climate change has become a priority for China.

Meanwhile, China is now at a stage of rapid economic development. Facing the multiple pressures of economic development, poverty reduction and greenhouse gas emission reduction, the combating of climate change is an arduous task in itself. As a responsible developing country, China attaches great importance to the adaptation to climate change and fully recognises the importance and urgency of the need to combat climate change.

China adheres to the scientific outlook on development. Taking into overall consideration the economic and ecological development; the domestic and the international situations; the present and the future, a national plan to combat climate change has been formulated and implemented, and a series of policies and measures to combat climate change has been adopted.

China persists in the basic national policy of resource conservation and environmental protection, efforts to control greenhouse gas emissions and the strengthening of sustainable development capacity.

Energy conservation, energy structure optimisation, ecological protection and development are supported by scientific and technological progress. We are accelerating the transformation of China's ecological economic development pattern. We are also promoting international cooperation, continuously improving our capability of combating climate change and making new contributions to the protection of the global climate.

China has actively promoted efforts to mitigate climate change. A series of policies and measures have been implemented involving adjusting its economic structure, transforming the development pattern, strengthening energy conservation, increasing the efficiency of energy utilisation, optimising the energy structure, and promoting afforestation. These steps have led to remarkable achievements.

To ward off the international financial crisis, the Chinese Government has invested 4,000 billion yuan in expanding domestic demand, of which 210 billion yuan was allocated for energy conservation, greenhouse gas emission reduction, and ecological projects; and 317 billion yuan for structural adjustments and technological upgrading. The investment in climate change adjustment accounts for a large

proportion of the whole economic stimulus package plan.

1. <u>Adjusting economic structure</u>, promoting industrial upgrading

The Chinese Government has formulated and implemented a series of industrial policies and specific plans, which makes reduction of energy and resources consumption an important part of industrial policies. China is promoting the upgrading and optimisation of its industrial structure and striving to form an economic development pattern characterised by low input, low consumption, low emissions and high efficiency.

2. <u>Stressing energy conservation and</u> <u>improving energy utilisation</u> efficiency

The Chinese Government sees energy conservation as a basic national policy and adheres to the long-term principle of promoting both energy development and conservation, making conservation a priority. The Chinese Government has firmly established the objective responsibility system and utilises the financial resources of the central government to accelerate key projects concerning energy conservation and greenhouse gas emission reduction. It also promotes energy consumption- and greenhouse gas emission controls in key areas and implements projects to benefit the people – with energy products, backed conserving bv financial subsidies. In addition, it is greatly improving the energy utilisation efficiency of terminal energy consumption products. Through this effort, it is expected that China will have reduced energy consumption per GDP unit by 20% in 2010 - compared to 2005 which will save more than 600 million tonnes of standard coal and equals carbon dioxide emission reduction of more than 1.5 billion tonnes.

- 3. <u>Developing renewable energy</u>, <u>optimising energy structure</u>
- In the medium and long term

renewable energy development plans, the Chinese Government envisages that renewable energy will account for 10% of the primary energy consumption by 2010, and 15% by 2020. At present, the hydropower installation capacity, solar water heater installation area and solar wall tech power capacity of China ranks first in the world; its wind power instillation capacity ranks fourth in the world. China is now formulating its "New Energy Industries Invigoration and Development Plan"; it will strengthen support for new energy industries, such as wind power, solar energy, biomass, and new car fuel.

4. <u>Reducing greenhouse gas emissions</u> in agriculture and rural areas

China has implemented a project of formula fertilization by soil testing in 1,200 counties nationwide, which guides farmers to fertilize their crops scientifically and reduce nitrous oxide emissions from their fuels.

China is also promoting protected conservation with straw covering and field reservation to increase the organic carbon content of the soil. China has established a grassland biological composition mechanism and realises the balance between grassland and livestock, involving restriction and rotation of grazing. Livestock numbers on the grassland are kept under control to prevent grassland dilapidation.

Meanwhile, China is strengthening the development of marsh gas utilisation in rural areas and promoting renewable energy technologies such as solar energy and firewood-saving stoves.

5. <u>Promoting afforestation</u>,

strengthening carbon sequestration Since the 1980's the Chinese Government has implemented a series of measures such as increasing financial input for afforestation and encouraging voluntary tree planting by citizens, making a newly afforestated area of on average 4 million hectares every year. Through collective forest rights reform, the state arouses the initiative of farmers to participate in tree planting and forest protection. The forest coverage rate in China has increased from 12% in the early 1980's to 18.1% at present. The urban green-land area has reached 1.747 million hectares with a green coverage rate of 37.4%, effectively increasing the greenhouse gas absorption capacity.

#### 6. <u>Strengthening research and</u> <u>combating climate change</u> scientifically

China has listed measures against climate change in its development programme for science and technology. Through nearly 20 years of effort, China has established a team of experts. focused both on basic and application research. These interdisciplinary experts have made a series of innovative achievements. providing important scientific and technological support for China's efforts to combat climate change. National scientific research bases have been established, as well as major monitoring network systems such as the National Climate Monitoring Network. Research development and demonstration of advanced technologies to combat climate change have been strengthened. To combat efforts of enterprises, universities and research institutes are accelerating the industrialisation process of advanced technologies. Stable government funding has been arranged and funds are also raised through multiple channels in society.

Combating climate change is the common responsibility of mankind. Parliamentarians from different countries can make special contributions to this cause. I would like to extend my gratitude for the arrangement of this meeting which has provided a great platform for exchange.

Here I would like to put forward some ideas and suggestions on combating climate change and exchange them with fellow parliamentarians. I believe the following principles should be adhered to.

First, combating climate change should be tackled within the framework of sustainable development. Climate change arose within the process of development and we should resolve this problem in tandem with the development process. This will support development sustainable while combating climate change and strive to realise the dual success of developing the economy and combating climate change.

"Common but differentiated responsibility" is the core principle of the United Nations Framework Convention on Climate Change (UNFCCC). No matter whether a country is developed or developing, all countries share the responsibility for adopting measures to mitigate and adjust to climate change; however, due to different histories, development levels and stages, national capacity, and contribution patters, developed countries should be the first take responsibility for to their historically accumulated emissions and produce high per capita emissions. They should take the lead in reducing emissions, while at the same time providing funds and technological transfers to developing countries. Developing countries should adopt active measures to adjust to and mitigate climate change in the process of developing their economies and eliminating poverty. Emission reduction should particularly be vigorously implemented and developing countries should make contributions to jointly combat climate change.

We should focus both on mitigation and adjustment. Mitigation and adjustment to climate change are two organic parts of the task. Mitigation is relatively long term and arduous, while adjustment is more realistic and pressing – especially for developing countries. We should take into account both mitigation and adjustment, giving equal importance to both.

The UNFCCC and the Kyoto Protocol are the main levers for combating climate change. The UNFCCC and the Kyoto Protocol established a legal basis for international cooperation in the fight against climate change, in agreement with the international community.

The two formed – by far – the most authoritative, common and universal international framework for combating climate change. We should firmly adhere to the role of the UNFCCC and the Kyoto Protocol as the core mechanism and main channel for combating climate change. Other forms of bilateral and mutual cooperation should be supplementary to the UNFCCC and the Kyoto Protocol.

We should rely on scientific and technological innovation and technological transfer. Technological innovation and transfer are the basis and pillars in this respect. Developed countries have a responsibility to promote international technological cooperation and transfer. promoting their While domestic technological research and application, developed countries should carry out their promises to developing countries in funding and technological transfer so that the latter can receive the needed funding, utilise climate-friendly technology, and increase their ability to mitigate and adjust to climate change.

We must promote public participation. To combat climate change, we need transformation of traditional production and consumption patterns and this needs the participation of the whole society. China is striving to build a resource-conserving and environmentallyfriendly society and cultivating an environment in which the government takes the leading role; together with enterprise participation and voluntary public action, and strengthen the social responsibility of enterprises and the global environment awareness of the public.

Climate change is one of the most serious challenges human society faces in the 21<sup>st</sup> Century. It affects the living conditions of mankind and the development of all countries. The members of the international community need to cooperate with each other in this joint effort. China has fully recognised the seriousness and urgency of combating climate change with а highly responsible attitude toward the long-term development of mankind.

China has made continuous efforts and active contributions to combat climate change, and will continue to implement active policies, measures and actions against climate change. As always, China will actively participate in the international cooperation in this cause.

Thank you.

#### [Chair]

Now last, but not least, is Hon. Dr. Rajendra Prasad from New Zealand. He was an Associate Professor in Social Policy and Social Work from Massey University. He was involved in Race Relations and now he is the current committee member of the Social Services Committee; the Spokesperson for the Community and Voluntary Sector; and the Associate Spokesperson for Ethnic Affairs, and for Social Development.

[Hon. Dr. Rajendra Prasad, New Zealand]

Thank you Mr. Chair. My greetings to you all. As you now know, I am a member of the New Zealand Parliament and a member of the opposition, and I am also a member of the New Zealand Parliamentarians Group on Population and Development (NZPPD). I am from the Pacific, Fiji being my country of birth. My ancestors were originally from India. I greet my friends from India as well. I thank you for the opportunity to address this meeting and in doing so I convey good wishes from our parliament to you and also from NZPPD.

New Zealand has a relatively small population of 4.2 million. Its emissions account for 0.2% of total global emissions. Thus from a New Zealand perspective it depends on migration activities by other major emitters to reduce global warming. This has not prevented New Zealand, however, from being a good global citizen and to undertake its fair share of actions to reduce global emissions. New Zealand has too much to lose in its international trade and tourism activities if it were to rely entirely on efforts by other countries.

There are also environmental and economic benefits from climate change mitigation in terms of conservation of natural resources, better air and water quality, sustainable land use, more efficient production, and the development of new markets.

New Zealand's concrete response to mitigate climate change effects have focused largely on dealing with environmental impacts. In New Zealand most greenhouse gasses come from agriculture and transport and they are offset by large removals from forestry. Fifty percent of New Zealand's emissions are from agriculture alone. Its main response has been its Emissions Trading Scheme (ETS) with specific arrangements for the entry of different sectors into the scheme progressively over the transition period. However the introduction of an ETS has not been an entirely smooth process.

In its response to climate change the previous government legislated for a greenhouse gas emissions trading scheme (NZ ETS). The core elements of

the scheme imposed an obligation on participants to surrender one emissions unit for each tonne of greenhouse gas emissions that they were responsible for. To meet this obligation participants also had to monitor their activities and calculate any emissions that arose from their activities.

The NZ ETS also provided for participants whose activities removed greenhouse gas emissions from the atmosphere to earn credits for each tonne of emissions they removed. These emissions units could then be sold on the market for a profit. The NZ ETS was linked to the international Kyoto market and other countries' domestic trading schemes, or will be when they are established. The scheme applied forestry, liquid fossil fuels (transport, stationary energy), industrial processing, agriculture and waste. A timetable was set up, under that first legislation, for when each sector came into the scheme.

The scheme also set up a system for allocating New Zealand Units (NZUs) either by tender or provided free by the government, which means the government paid for them. People, like owners of pre-1990 forests, received units as did certain people in the agricultural and industrial sectors.

This enactment also created a preference for renewable electricity generation. It did this by providing a ten-year restriction on new fossil-fuelled thermal generation except for what was required to maintain security of supply.

The last government was determined that New Zealand would carry its own weight in the international areas at the risk of some people feeling that there was no need for New Zealand to be a leader in developing mitigation responses to greenhouse gas emissions. Even though New Zealand was a relatively small polluter, its level of greenhouse gas emission was high relative to its population size.

With the change in government in November 2008 came a vastly different political perspective on climate change mitigation policies. The new conservative government took a very different view on NZ ETS. It amended, in controversial fashion, the previous enactments in several far reaching ways. While the Opposition sought a consensus across parliament on the NZ ETS the ruling party, supported by its minority partner, preferred a majority position, albeit a very slim majority, to make a number of radical changes to the scheme approved by the legislators of the previous government. For example, the government delayed the commencement of unit surrender obligations for the agriculture sector until 2015 and provided agriculture with free unit allocations on an intensity basis; provided free units to emissionsintensive, trade-exposed industry to be phased out only when Australia set similar levels to New Zealand, and generally provided a much longer period of transition - these were major and significant changes.

The effects of these changes to the NZ ETS gave some industries "the right to pollute" on an intensity basis and shifted the burden from the polluter to the tax payer. Some estimates are that it will cost the New Zealand tax payer around \$2 billion by 2030. These costs arise because the government has taken responsibility for a proportion of emissions from the firms that receive free allocations.

The NZ ETS is but one tool to combat the effects of climate change. A country also needs complementary non-price based measures as tools to combat the effects of climate change. These include expanded renewable energy targets, investment in research, development and demonstration of low-emissions technologies and actions to promote efficiency.

Because its major polluter is animal farming, major research efforts into methane gas reduction from animals have also been funded. Once fully developed these represent concrete actions to reduce our emission levels.

Adaptive efforts are being designed in New Zealand to partner mitigation efforts. The Ministry for the Environment has a climate change adaptation work programme to promote responsiveness to the physical effects of climate change. Partner organizations include stakeholders such as local government, planners, engineers, insurers, surveyors, and lifeline utilities to support the delivery and promotion of adaptive initiatives.

Local Authorities have particular responsibilities to take adaptive measures to counter the effects of climate change in the natural- and built environments. This includes coastal protection to manage the effects of rising sea levels.

The Ministry is developing a range of adaptation resources including educational tools for students and teachers, and urban resources for city residents. There is potential in educating New Zealanders of the risks of climate change and preparing them to minimise the risks and maximise the opportunities. Increasing awareness of climate change amongst land owners is also a priority.

New Zealand is a Pacific nation and has close relationships with our Pacific neighbours, although I do not have the mandate to speak for the Pacific. However New Zealand does have special constitutional relationship with a number of Pacific countries like Niue, Cook Islands and Samoa, and we are members of the Pacific Forum. It is clearer now than ever before that the small Pacific islands states are particularly vulnerable to the effects of climate change, a point which has been made with respect to other countries by previous speakers. They have contributed least to global warming but will be catastrophically affected by its effects. Even though they have been unable to attend this conference the voices of the peoples of the Pacific, especially those of its indigenous people, are part of New Zealand's efforts to address the effects of climate change on populations.

The predicted rise in sea levels will have a catastrophic impact on Pacific island states that are on low lying atolls and islands. New Zealand's relationship with the Pacific will require it to respond to future calamities resulting from climate change and will need to respond. The most vulnerable group in the Pacific are women.

We can see then that in the contemporary environment there is a heightened awareness of climate change and long term global sustainability. That discourse has matured to global consciousness and the current approach of developing solutions that are tied to economic costs and penalties reflect the contemporary currency of relations amongst nations.

However no one in this room believes that addressing these types of things we have talked about is enough. We also need to put climate change in the context of population dynamics, especially its effects on the most vulnerable groups, and their interests given equal priority.

The current world population is at 6.7 billion and growing, continuing to put increasing pressure on the environment and natural resources. Every year there are an additional 78 million people in the world. We need to take measures to stabilise the population, and the best way to do this is by ensuring universal access to reproductive health and empowering women.

Over 215 million women worldwide would like to plan their families but they had no access to the means to do so. We must meet these family planning needs; most importantly so that women can enjoy their right to lead healthy reproductive lives, but the ripple effects will also have far reaching benefits, particularly for both environment and society. New Zealand is reasonably advanced in making these tools available to our women but we could do more through our aid relationships to extend this further into the Pacific.

While population growth is a significant issue to deal with in relation to climate change, the relationship between population issues and climate change is more complex than that, as other population dynamics must be considered in adaptation measures.

For example what we must take into consideration is the scale of growth in urban centres in the years to come. Over the next 20 years, the world's urban population is expected to increase by 1.7 billion people, most notably in developing countries in Africa and Asia. This could potentially be detrimental to the environment if unmanaged, but if well-planned for now, could actually be beneficial to the environment. Greater population density could mean lower per capita emissions compared to those living in rural areas. Well-planned and managed urban planning can be hugelv beneficial not only to the environment, but also to poverty reduction and the empowerment of women.

We are also well aware of the threat of more frequent natural disasters as a consequence of climate change, and as urban centres grow, these populations could be extremely vulnerable to natural disasters. Many large cities around the world are situated in coastal areas, and with the threat of sea level rises, measures must be taken to reduce this risk, and to particularly minimise the risk on the poor. Occurrences such as sea level rises and other natural disasters are also likely to cause many people to migrate, and more research is needed to understand what patterns we can expect and how best to deal with this.

These are just some of the population issues we need to consider in adaptation measures to climate change. These examples demonstrate just how influential population issues are on the environment and how important it is to address them.

While I do not want to paint an inaccurate picture of New Zealand I can say with some confidence that its citizens are increasingly more conscious of their human rights, and especially gender issues. Even though our Human Rights Commission has been in existence for over 30 years and their advocacy for gender equality is powerful, we need to keep monitoring the effects of climate change mitigation on women and the most vulnerable.

However what New Zealand can do – and has been doing to some extent – is advocating for human rights in the Pacific and through these efforts is addressing the gender specific impact of climate change on the populations there. The NZPPD has also undertaken specific programmes of consultation and advocacy on population and maternal health issues in the Pacific.

In conclusion, New Zealand's location and environment provide it with a particular appreciation of climate change and how it is designing its response. We are intimately Pacific as well as Asian. Our interests lie in this region and what I have described are some of the concrete measures we are taking. They are not perfect but they are particular to us and our environment.

Thank you.

## SESSION 4 Discussion Chair: Hon. Tan Seng Giaw MP, Malaysia

#### [Chair]

Now you have heard from four countries: Lao PDR, Vietnam, China and New Zealand who have all talked about the concrete measures they are taking to try to combat climate change.

You know, the overall universe is around 13.7 billion years old; our Earth is just over 5 billion years old, so we are relatively young. But in the unity of the Earth's humankind, we can do a lot of good in civilisation and culture, but we have also created great harm – what is powerful for good is also powerful for evil.

Right now I open the floor for you to ask questions on what concrete measures respective governments and respective parliaments are taking to try and combat climate change which is going to be affecting our Earth for decades, if not centuries.

Please go ahead, Lao PDR.

#### [Lao PDR]

First I would like to congratulate all the honourable speakers for sharing their information.

I would like ask about what kinds of concrete measures there are to combat climate change. I would like to know about the carbon checks in your countries, according to the Kyoto Protocol framework; as well as about the reduction of emissions when there is deforestation, and for afforestation conditions.

Please give some examples from your countries of CDMs and voluntarily carbon markets because Laos needs more information about the carbon market and the climate sequestration.

The second question is what the linkages are between climate change and how it will affect the achievement of the MDGs. What roll can the parliament take to supervise the implementation of the government to ensure all the MDGs? Thank you.

#### [Chair]

Lao PDR, please go ahead.

#### [Lao PDR]

I would like to congratulate our speakers for giving us very comprehensive information.

I believe this is a question that all of the countries could perhaps answer and give information on: what percent of the world's population, especially farmers, actually understand climate change? We said that farmers are producing an increasing amount of  $CO_2$ or  $CH_4$ , so they are contributing to climate change and increasing global warming. But farmers have no choice but to produce  $CO_2$  and  $CH_4$  because they need food security – they need money for their children and for their lives.

We have said that we need to think about poverty alleviation, so we have to appeal to the government to take care of advocacy and support farmers to reduce CO<sub>2</sub> gas emission. The governments can also take measures to help provide good, appropriate technologies or bioorganic fertilizers agricultural production. for But businesses could also be involved in providing these things - businesses

need the farmers' products. Thank you.

[Chair] Thank you. Nepal, please.

#### [Hon. Rama Guragai, Nepal]

Thank you Mr. Chair. I would like to share some ideas.

There are 197 female parliamentarians in the Parliament of Nepal. We are working together on different issues and development issues, with the help of some NGOs.

Nepal is very rich in water resources, forests and agriculture; I think that water resources are our main property.

We would like to request that Asian parliamentarians of the region come to Nepal so that we can all share ideas and work together on population issues and adaptation to climate change.

The presentations gave us very good ideas that are there to help us. One point that we must keep in mind is promoting public participation. Public participation is important and public participation is working.

Political stability is also very important in order to make our programmes work, and it also aids in effective policymaking. Thank you.

#### [Chair]

Thank you very much.

The melting of Mount Everest's glaciers will actually affect all of us. This is a very important thing to bear in mind.

Malaysia, please.

#### [Hon. Abd Rahman Dahlan, Malaysia]

I would like to ask a question to the speaker from China. China is a big country and I am sure some of the issues facing the farmers are very critical to address. Malaysia, in comparison to China, is a very small country but we are also having some difficulties in monitoring the farmers' practices of agriculture. With China being such a huge country, I was wondering how Beijing is controlling or monitoring the practices of farmers who are facing open burning and overuse of fertilizer.

I was hoping you could share some of your strategies with us. Thank you.

#### [Chair]

India, please.

#### [Hon. Avinash Khanna, India]

I would first like to ask a question to the speaker from China. In your speech, the effect has been given that China has reduced 20% of energy consumption – this is a very good thing. How were you able to achieve this target; how did you reduce the energy consumption to the extent of 20%?

The second question is to Vietnam. We see in the hardcopy of the honourable MP's presentation that the Parliament of Vietnam has passed three laws to take on the challenge of climate change. I would like to know what the impacts of these laws are. Have the people accepted this law as it is?

To the speaker from the Lao PDR, has the Lao PDR made any laws or national policies on climate change?

From the New Zealand speaker I would like to ask how many people are involved in agriculture in New Zealand. Is New Zealand expanding their agriculture; if so, how are you protecting your forests?

#### [Chair]

Thank you. We will now allow the speakers to answer the questions.

#### [Hon. Dr. Rajendra Prasad, New Zealand]

To my friends from Laos, I will try to answer the question about the role of the voluntary carbon market from what I understood.

New Zealand has made a very firm decision to actually trust the market, to actually create a carbon market and let there be trade on it because our strategy has several layers and aspects to it. But it is certainly measuring pollution and putting a cost on pollution, while at the same time promoting carbon sinks through forestry.

And to maybe answer the last question as well, New Zealand is a big country and has huge forests, so there is plenty more room to plant more forests and we are able to do that. Land is not a difficultly; it is a matter of making sure that it happens and finding the right incentives to do that. We believe that the market will produce certain efficiencies and discipline, where polluters know there is a cost.

I think your question was also, as far as I understood it, on the role of governance. Clearly governance, and therefore parliament, has a major role to play in shaping a country's response to emissions and climate change. Certainly countries will decide for themselves. New Zealand did decide to do it very early; we signed the Kyoto Protocol quite early; we came up with our scheme quite early, and even the present scheme is there as well. Governments must take leadership, must really show how this can be done, take the people with them, and have multiple programmes that could get us there.

The second question from our other friend from Lao was what percentage of farmers understand climate change? I cannot speak for any other country but I know certainly that in New Zealand there is broad acceptance that climate change is a reality; the country has to respond to it and be a good global citizen. We also, however, have our "climate change deniers", people who believe that the science is not there.

I think that this conference and the resource persons who have spoken here have made it very clear. I personally accept the notion of climate change, my party accepts it and New Zealanders accepts it. We all believe that the science is there, it is incontrovertible and we simply have to go to the next stage and find solutions. Hard though it might be, if we promote this, work on it, and if the community of nations works on it, who knows where our relationships go in the future? There could be a number of other problems, international issues that could be resolved through this kind of mechanism as well.

There was also mention of the role of farmers. Our farmers are huge polluters but they are a major part of our economy. We will put a cost on the pollution that they create because they also pollute our streams and so forth. At the same time, we will put a lot of money into research to see what science produces as answers in the long run – the fund that has been created after the recent conference is working on that as well.

Increasing citizen literacy about global emission and climate change is a real important goal and task; therefore the need to focus on teaching and education is quite important.

I completely agree with my sister from Nepal, that we must promote public participation. I think if we do not have that, governments will go off in one direction. Governments can neither wait until their citizens tell them what to do, nor stop leading. I think it has to bring them together and work on these issues at the same time, and that is something we have a lot of energy for. Lastly I come to the question from my friend from India.

As I mentioned previously, agriculture is quite important for us and agriculture is still increasing. The research into how to do it better is quite important, so we kept that pressure on. While we are also ensuring that there is a cost to the pollution that the farmers create, the present scheme gives them a long holiday; when we return to government we will make that a short holiday. If you give farming, the polluters, such a long holiday and a load of free units, you essentially put a greater cost on everybody else. I think we do have political differences about this one, but certainly there will be some change to that in the future. People who are in farming and businesses do not want any extra impost on their businesses - you just have to make it compulsorily.

We are able, at the same time, to focus on our forestry. If we do that and put a positive value on that so that it becomes tradable so people who can buy units from those rain forests, we will also create a market as well. Thank you.

#### [Chair]

Now Hon. Song Fatang from China.

#### [Hon. Song Fatang, China]

The parliamentarian from Malaysia asked a question about the Chinese farmers. There are a huge number of Chinese farmers – it used to be numbered at 800 million and is now estimated at 600 million farmers. To promote farmers' participation to combat climate change is also a very important part of the joined efforts in this cause.

China has implemented four major policies and measures to work in this respect. The first one is through television broadcasts, the media, training sessions, and school classes to cultivate the public awareness of farmers, make them aware of climate change, and help them know how to combat climate change.

The second is to give specific guidance on what farmers in different areas should do for example, the soil testing in the fertilization process. We have to help them in deciding what the quality of the soil is, what specific plants are suited for a specific type of ground – it is a measure which is effective to save fertilization materials and also to protect the environment. We also teach them to plant different species in agriculture which have pest resistance, or draught resistant plants which will suit the specific environment, and also suit in the climate change of today.

In terms of policies, the government provides funding for the publicity of the efforts against climate change. The government promotes the usage of firewood-saving stoves and marsh gas utilities. As the government, we provide an amount of money to the farmers to help them to buy these facilities. Some of the excellent examples are shown to tell what the other farmers can do.

Policy measures are very important in the combat against climate change. China has done some work in this area and will take further measures to combat climate change in. We believe that international cooperation in this cause is of vital importance and we would like to strengthen our cooperation with international organizations and other countries.

The parliamentarian from India asked about our emission reduction projects and objectives. There is, indeed, a great amount of pressure for China to reach the emission reduction goal. As I just mentioned in my speech, there are six principle reduction policies that China has adopted; including adjusting the economic structure, strengthening energy conservation, improving energy developing efficiency, renewable energy, optimising energy structure, reducing greenhouse gas emissions in agriculture and in rural areas, promoting afforestation, and strengthening research in combating climate change scientifically. It is a series of policies that have been jointly and comprehensively implemented, but in the future we will still adopt more measures and provide more funding to realise our goal. Thank you very much.

#### [Chair]

Now, Vietnam please.

#### [Hon. Dr. Nguyen Van Tien, Vietnam]

The first question that was raised was from Laos, about the effects of climate change and the MDGs.

I think that climate change has several effects on the MDGs, especially MDG7 on the environment. There is, indeed, a strong relationship between climate change and the MDGs.

There have been several droughts in some provinces of Vietnam, and there are several effects that hit after the drought. One such effect is an increase in child malnutrition. When children's malnutrition increases, so does infant mortality.

Another close relationship between climate change and the MDGs is that when there are storms and droughts in the rural areas, the poverty rate and poverty line increases – this is certain.

When I was speaking to the UN representatives and other international organizations yesterday, they said when you are talking with the MPs and policymaking, you should have evidence-based information, such as knowing by how much percent situations are rising. In Vietnam dengue fever has increased by two- or three times over the past two years – this is an evidence-based

number.

The second question was about the understanding of climate change. As I mentioned in my speech, we have conducted surveys in Vietnam which show that around only 5-6% of people understand climate change. This figure may be a bit higher among the MPs because they have attended conferences, read documents about it, or have heard something on the television.

My colleague, Hon. Dr. Ho Thi Thu Hang, gave a presentation yesterday on "Women's Empowerment for Adaptation Means to Climate Change". She mentioned that one survey showed that around 60% of women in Vietnam did not have access to weather forecasts. This means that it is more difficult for them to really understand climate change.

If we want to raise this issue, we need to conduct more advocacy activities to help people, communities, MPs – especially policymakers – to understand and support measures to fight climate change.

The MP from Lao raised the question of how can we get the farmers to understand and support measures against climate change when they are still very poor? They need poverty alleviation, they need food, and they need money for raising children.

I think that all the resource persons have recommended that climate change, gender, and population issues must be integrated within the poverty reduction programme. This means that when you want your parliament to approve a poverty reduction programme, you should consider the effects of climate change in that programme.

Another question that was raised by our colleague from India was about the implementation of laws. As I mentioned in my presentation, the Parliament of Vietnam approved a lot of laws in connection to climate change and the environment. Every time we approve a law in parliament, people raise the question, "what is the effectiveness of it; how will the project be implemented?" The implementation of the law comes from two sides, the parliament and the government, but it is implemented by the government.

The government proposes laws for parliament to discuss, and then adds or deletes items. When the government proposes measures for dealing with climate change, they put it into the law. When the parliament is discussing and approving the law, the implementation becomes the responsibility of the government and the people.

After 2, 3, or 5 years of law enactment, we always re-evaluate the effectiveness of the implementation. For example, Vietnam has special land for the plantation of more than 5 million hectares of forest. Every year, for the past 10 years, the parliament has been monitoring the implementation of this legislation. How many million hectares have been planted or not planted? Sometimes the parliament also raises the question on funds.

Another law we have is the Law on Gender Equity. In this law, it stipulates that every bill must be screened by the Committee on Social Affairs before it is approved by parliament to evaluate what has been done for gender integration in the law being proposed. The law also stipulates that the government must report annually to the parliament on what they have done for the gender equity programme to implement this law. The Committee for Social Affairs then monitors that and makes comments on the report to the government.

Generally, we think the implementation of laws are good; sometimes it is not

but after three or five years we review, evaluate and command for a change or amendment. Thank you.

#### [Chair]

Last, but not least, is Hon. Dr. Ty Phommasack.

**[Hon. Dr. Ty Phommasack MP, Lao PDR]** I would like to respond to the question raised by the Indian delegation. I had mentioned that the Lao National Assembly has approved the Law on Environmental Protection together with the Land Law, Water Resource Law, Forestry Law, and other laws related to climate change. Under these laws, at the national level, we set up the National Committee for Monitoring and Management of Environment. H.E. Khempheng Pholsena had spoken a little on this yesterday.

We have the structures and institutions to deal with emissions monitoring and management on the national, provincial and district levels. We are only in the first, initial steps of the process. We are conducting research and designing tests for ways of increase carbon sinks in the forests.

As previously mentioned, our government is going to increase forest coverage to 65% by 2015 and 70% by 2020. We have been working with the UN and World Bank teams to design the strategies, and together with them we have decided the estimation of the increased forest coverage and carbon sinks.

The carbon market is quite new to us. The current figure is that by the year 2020, forest coverage will account for 16 million hectares and will fill around 70% of the country, but this is just the first step – we desire more. Soon we will hopefully be able to contribute more, and participate in developing CDMs and more trade. Thank you. [Chair] Please go ahead, Indonesia.

#### [Hon. Dr. Surya Chandra Surapaty, Indonesia]

To Hon. Dr. Van Tien from Vietnam – could you kindly elaborate on your statement that when we pass a law on public health, we must think about on climate change? In my opinion, climate change is a determinant of public health – pubic health is affected by climate change – so, could you specifically elaborate on that?

I would also like to know your suggestions on how to increase the knowledge of MPs on climate change? Thank you.

#### [Hon. Dr. Nguyen Van Tien, Vietnam]

Thank you for your question. How, indeed, can we increase MPs' knowledge of climate change? This is our duty. Events such as today's conference are good opportunities to increase the knowledge of fellow MPs.

Our committee and VAPPD are integrating population, public health, gender and climate change – parliamentarians who have such knowledge can teach other MPs.

Regarding the linkage between public health and climate change, incidences of dengue fever increased in Vietnam due to the effects of climate change – a clear example that public health deteriorated because of climate change. The infant mortality rate, maternal mortality rate, and malnutrition are also affected by climate change. We are addressing these issues through public health legislations.

#### [Hon. Ledia Amalia Hanifa, Indonesia]

I have questions to Hon. Prasad and Hon. Song Fatang. It was pointed out that some government policies are specialised in climate change and that these policies have limited budgets. Many women are working in agriculture, so how can we increase the budget for promoting women's participation – especially women working in agriculture – in combating climate change?

#### [Hon. Dr. Rajendra Prasad, New Zealand]

I think that climate change and gender issues are not clearly linked in New Zealand but we have strong human rights dynamics, so that will support the linkage between climate change and gender.

Research has been conducted on women's issues, especially on women's participation in economy, farming, and their increasing role in agriculture. Some community groups are involved in advocacy on women, but otherwise I think that most people in our country do not think that climate change and gender are closely linked.

#### [Hon. Song Fatang, China]

As I mentioned in my presentation, in order to combat climate we have to promote participation not only by farmers but also by women. There is a Women's Federation in China that has a central committee as well as branch organizations in local areas. One of the main functions of the Women's Federation is to organize women to participate in public activities. They also organize various activities for women and girls. It is not just for combating climate change, and it is promote important to women's participation in public affairs – we need to advocate for that. There is a Chinese proverb that goes "Women Hold up Half the Sky". When it comes to the utilisation of resources and energy efficiency facilities in addressing climate change, women's participation is essential and we are promoting that.

We are also exerting our best to promote the status of women. More than 40% of the officers in the government are female. In the central areas, female employees account for 42% of the total employees, and that is higher than the world average of 37.5%. Hon. Xin Fang, who is with us today, is not only a member of the Standing Committee of the NPC, but also a scientist at the Chinese Academy of Sciences. Hon. Fang is working on emission reduction projects and is a great representative of women in other important fields as well.

#### [Hon. Dr. Nguyen Van Tien, Vietnam]

Please let me add to the answer of the question from Indonesia. At an APDA meeting several years ago, a Japanese expert talked about tropical and infectious diseases. According to him, countries in tropical zones, such as Vietnam and Indonesia, will experience an increase in infectious diseases if the temperature rises and hot seasons are prolonged. In my presentation I touched on the fact that cholera and dengue fever have been recurring in Vietnam – even in the capital city – during the past two years.

I read in the newspaper that the Lao Vice-Minister of Health was raising the alarm that the country may face the issues of food security and cholera. I hope public health experts and WHO experts will come to these meetings and talk about new and recurring infectious diseases.

#### [Chair]

Thank you. We are here with ideals and philanthropy, and with resolution that we must do something after we return to our countries. If we use natural resources, we have to pay a price. It is very important that we think about these issues very seriously. If we do not remember our mistakes from the past, we may repeat these mistakes. It will take time to resolve issues but we do not know how long it will take to even address climate change.

These four panellists did a fantastic job, so let us express our honour with applause.

#### [MC]

Thank you very much – applause for the Chair for his wonderful work.

## SESSION 5

## Discussion for the Adoption of the "Statement of the 26<sup>th</sup> Asian Parliamentarians' Meeting on Population and Adaptation to Climate Change"

## Chair: Hon. Prof. Dr. Boungnong Boupha

MP, Lao People's Democratic Republic

At the beginning of Session 5, the draft statement produced at the Drafting Committee Meeting the previous day was presented to participants.

Under the Chairpersonship of Hon. Prof. Dr. Boungnong Boupha MP, Lao PDR, various points of view were aired and debated to highlight the issues related to population and climate change. The result of the session was the "Statement of the 26<sup>th</sup> Asian Parliamentarians' Meeting on Population and Adaptation to Climate Change", which was unanimously adopted by the participants on 26 April 2010.

# **CLOSING CEREMONY**

## CLOSING CEREMONY Address

### Hon. Prof. Dr. Pinit Kullavanijaya

MP, Thailand; Secretary-General, The Asian Forum of Parliamentarians on Population and Development (AFPPD)

Climate change has become one of the most important world's topics, especially now that we have seen disastrous massive earthquakes in Haiti and China. There have been excessive rains in many parts of the world while there is practically no water in the others. We have also witnessed the recent volcanic eruption in Iceland which disrupted air travel in Europe. Is this all truly connected to climate change, or is it that we only have come to know about these natural disasters due to the improvement in communication technologies? Is there any linkage to the extreme population growth and the race of human kind to sustain our incomprehensible population size?

I sometimes think that we are deliberately ignoring the fact that our population has skyrocketed and that we are not going to be able to support them in the future.

From where exactly can we arrange employment for all people in a population the size of India. Bangladesh, Indonesia, China or Pakistan? Even when we can find equity, poverty will force people into prostitution or other indecent work or crime in smaller countries such as Thailand and our neighbours. Even in the so-called rich and developed countries, poverty persists.

The Asian Forum of Parliamentarians on Population and Development (AFPPD) has persistently discussed this issue through our meetings such as the recent Asia-Pacific "Regional Seminar on Indigenous Peoples, Climate Change and Rural Poverty" held in Manila, the Philippines last month. We have found that parliamentarians need to be provided with more convincing information about the pros and cons of the inter-relationship among population, climate change and poverty.

That is the reason why we are again discussing climate change but from another angle which is adaptation to climate change. We must accept that both climate change and population growth problems are going to carry on for some time in the future, and unless we initiate an adaptation strategy, we are going to lose.

We, parliamentarians, must unite and convince ourselves, as well as our people and government, that we can plan our population to better serve our nation's needs. We can halt climate change. All that is required is only to work together toward this goal.

In my own parliament, I have initiated a sub-committee on population. We initiated open debate with all stakeholders such as the government, civil societies, non-government organizations and other groups, as well as individuals to look into problems such as maternal mortality.

This parliamentarians' conference is very timely because there will be a wide debate on MDGs taking place at the United Nations soon. We, parliamentarians, under the leadership of our Chair, Hon. Yasuo Fukuda, should play an important role in this summit. May I take this opportunity to also congratulate AFPPD and its members for winning the UN Population Award for the year 2010. There has been a lot of excellent work accomplished in the years, last and this latest 29 accomplishment provides us an example that the dedication of parliamentarians will deliver results.

The collaboration of AFPPD with Japanese Parliamentarians, JPFP and APDA has been long lasting and valuable. I hope this collaboration will be even stronger as time goes on. Hon. Yasuo Fukuda has provided a very supportive leadership to AFPPD for so long, and we truly cherish his patronage and guidance. The Japanese Government has also set up a special trust fund with UNFPA. This trust fund has been a backbone of parliamentarians' movement along with UNFPA, which initiated and supported AFPPD. This parliamentarian initiative has also been adopted by many other UN agencies.

I would like to also take this opportunity to thank all those who supported this meeting, and I wish to urge you to make a pledge that we will do whatever possible to highlight population growth and climate change problems that are currently taking place as we speak. It's still not too late to act.

Thank you for your kind attention.

#### **CLOSING CEREMONY**

Address

### Hon. Chieko Nohno

MP, Japan;

Secretary-General, The Japan Parliamentarians Federation for Population (JPFP)

Thank you for your earnest deliberations over the past two days. I am sure I can speak for us all by saying that we had a very successful meeting, thanks to the generous cooperation of the National Assembly of the Lao PDR and the Lao Association of Parliamentarians on Population and Development (LAPPD).

The Asian Population and Development Association (APDA) - the organizer of our meeting - has supported your activities over the years, also by serving as the JPFP Secretariat, and as the office of the AFPPD Chair. It has continued its activities whilst faithfully upholding the principles of its establishment, namely that sustainable development can only be achieved with the stabilisation of population and resolution of its issues.

We have seen substantial outcomes in the wake of its work. For example, I have learned that Vietnam, which serves on the AFPPD Executive Committee, was motivated to establish the Vietnamese Association of Parliamentarians on Population and Development (VAPPD) after a Vietnamese Delegation was invited to Japan by APDA.

Since then, with remarkable energy and speed, Vietnam enacted – one after another – laws concerning population, family planning, reproductive health and the elimination of violence against women. The result was an impressive reduction of halving its population increase in 10 years.

Again, following an APDA conference hosted by Vietnam under the theme

"Water and Population", Kyrgyzstan enacted a law regarding water for the first time.

APDA also hosted parliamentarians' meeting on the eve of the 1995 Fourth World Conference of Women (FWCW) in order to submit to the FWCW views of parliamentarians around the world.

In the interrelationship between population and food security, APDA took part in a series of discussions at international conferences on population, food security and globalisation; and was able to have their outcome reflected in the United Nations General Assembly document for the Cairo + 5 Review Conference.

APDA also contributed in the field of research to support parliamentarian activities on population and development. To cite an example, a recommendation drawn from APDA's research which was made to the Government of Kazakhstan contributed to its tax reform which played an important role in achieving the country's level of food security.

These significant impacts are all outcomes of parliamentarians acting on important issues in their own countries.

APDA and JPFP are proud for having been able to recommend positive ideas for sustainable development and to have, perhaps in a small way, contributed to the parliamentarians' activities as their secretariats.

The importance of the theme we have addressed at this meeting, "Population

and Adaptation to Climate Change", may not yet be fully appreciated.

In that sense, this meeting may have been the first international conference to have addressed it.

Today, much of the funding for international cooperation is allocated to the issues of climate change. This is affecting the field of population. Therefore, to help resolve the problem, it is important to link these two subjects. By positioning population issues as adaptation measures to climate change, we should be able to direct the flow of funds from climate change to population issues.

That is to say, by introducing population issues as adaptive measures to manage climate change, we may be able to open the possibility for a new financial mechanism for population issues.

"Without the resolution of population issues, there can be no sustainable development" – this can be said to be our principle.

Times change and the focus of global interest changes, but given the limits of our planet this principle will remain ever so true.

Ultimately, the issue of population is about creating a society where every child born can live in dignity.

As a midwife I have had the happy job of assisting in the birth of new lives. The experience has led me to realise that it is our responsibility as adults living in today's society to create an environment in which newborn children are able to live happy lives. It is my sincere hope that every single birth will be attended by a skilled birth attendant.

I was able to serve as a Member of Parliament representing the nursing profession. I worked to enact laws on domestic violence, gender identity disorder and reproductive health. I have also done my best to assist in establishing midwives associations in Vietnam and other countries around the world.

I am thankful that I was able to do all this because of the support I received from so many people and partnerships with parliamentarians in Asia and around the world.

Our parliamentarians' work on population and development have expanded and deepened from one generation to the next.

I am very happy to see many new participants at this meeting as well. As parliamentarians, there is no difference between the older or younger members when it comes to wishing for the happiness and welfare of the people we represent.

As we stay loyal to our original principles, I am confident that the Asian parliamentarians' activities for population and development will gain greater momentum as we go forward.

Please be sure to share the message from this APDA Meeting with your parliamentary colleagues when you return home.

I believe that our committed work will gradually change the world for the better. And when it crosses a certain threshold it will have the momentum to change the world in a big way.

I know some of you may be joining the post-meeting study tour and others will be heading home. I wish you all a safe return.

I look forward to seeing you in a corner of the world in the near future.

Thank you very much.

# CLOSING CEREMONY

**Closing Address** 

## H.E. Pany Yathotou

Vice-President of the National Assembly, Lao People's Democratic Republic

I feel honoured to be invited to attend the closing ceremony of the 26<sup>th</sup> Asian Parliamentarians' Meeting on Population and Development, a significant event held today in Vientiane Capital.

I attentively pursue contents and issues, which you have brought to discuss at this conference. The main issue that this event has paid attention to is population and adaptation to climate change. In particular, the focus is on women and smallholder farmers' empowerment while situations of the world change rapidly; particularly climate change, ecological and environmental degradation, fresh water resources' decrease, epidemics and other problems that occur. They are challenges to human stability and sustainable development, and they directly affect the socio-economic development of every country and the world as well.

In order to cope with these challenges, delegates at this conference have discussed together ways in which to find unified knowledge and understanding about the impacts caused by climate change, and necessary measures for population adaptation in order to deal with the situations in our region.

Sustainable development is the most important factor for building and maintaining the environmental balance, which all relates to population. Adopted in 2000, MDG7 and MDG8 relate to the development of the population's quality of living and environmental protection. In order to achieve this goal by the set target of

2015, we must consider the real conditions of population; including reproductive health, access to healthcare, reduction of the infant and maternal morbidity rate. familv planning. education and gender equality. Protecting the population from HIV/AIDS is a goal that is considered as the priority of human development by the world community and Inter-Parliamentary Union (IPU). One important duty of parliamentarians is to draft proper legislations to help people living with- or who are vulnerable to HIV/AIDS to live as normal people in society with dignity, are not discriminated, and have easy access to treatment. In order to realise this, the Lao PDR is drafting a law on the prevention of HIV/AIDS to consider at the upcoming 9<sup>th</sup> Ordinary Session of the National Assembly (Sixth Legislature).

Today, mankind is affected by climate change in regions, as well as in the world which is demonstrated by the temperature and sea level rise, decrease in fresh water, floods, and droughts – all of this constrains sustainable development. Thus, smallholder farmers' empowerment is a good way to help humankind to live and produce to ensure food security in harmony with nature. Furthermore, women's empowerment – which helps women take part in socio-economics and other fields - is the significant factor for guaranteeing population development.

This will require the concentration of adequate forces, resources and funds

for activities relating to population life and development. The assistance and continued cooperation of countries play an important role. In particular, the countries with small economies and low development levels need support and assistance in funds, lessons and experience from developed countries. Moreover, it is important to bring several parties, namely the private sector, vocational and social organizations, to take part in population Besides considering affairs. and adopting necessary legislations and policies regarding population and development, parliamentarians - as the representatives of the rights and interests of the people - must pay attention to encourage the allocation of necessary and adequate budgets for this field, including the budget of every country and Official Development Assistance (ODA).

Our conference has been able to meet target, and we the set have unanimously adopted the "Asian Parliamentarians' Statement on Population and Adaptation to Climate Change". I do hope that parliamentarians will bring this statement to be implemented effectively in their respective countries.

On behalf of the National Assembly of the Lao PDR, I express thanks to APDA, AFPPD, honourable delegates and colleagues for having trust in the National Assembly of the Lao PDR for taking part in hosting this event. I express our sincere appreciation to the Government of Japan for playing a leading role in actively and responsively contributing to Asian parliamentary work regarding population and development in the past; thanks to this, the overall tasks of parliamentarians have gained achievements step be step. I appreciate the delegates' active and constructive contributions which have made this conference a success.

I wish everyone good health, success in your noble tasks and a good trip back home.

Finally, I now declare the 26<sup>th</sup> Asian Parliamentarians' Meeting on Population and Development closed.

Thank you.

## Statement of the 26<sup>th</sup> Asian Parliamentarians' Meeting on Population and Adaptation to Climate Change

### Adopted on 26 April 2010 Vientiane, Lao PDR

We, parliamentarians from 13 countries attending the "26<sup>th</sup> Asian Parliamentarians' Meeting on Population and Development" – organized by the Asian Population and Development Association (APDA) from Japan and hosted by the Lao Association of Parliamentarians on Population and Development (LAPPD) – in Vientiane, Lao PDR from 25-26 April 2010, adopt the following statement:

From the very beginning of our activities, Asian and the Pacific Parliamentarians involved in population and development issues have recognized the importance of these issues in the context of achieving sustainable development and have correlated this with environmental issues.

Today, the threat of climate change has become a reality impacting adversely on food and water, security, population, health, and the environment. We must exert our efforts to sustain a stable environment and climate conditions which were previously considered as a "given" and this must be done through the participation by all, with shared responsibilities to differing extents amongst countries. Immediate collective action is essential to deal with the impacts of climate change.

International cooperation in combating climate change should persist in the United Nations Framework Convention on Climate Change and the Kyoto Protocol, and "common but differentiated responsibility" (CBDR). The impact of population and climate change on population development should be considered in the mitigation and adaptation to climate change.

We affirm that:

- 1. addressing population growth is one of the most essential conditions and effective measures for addressing climate change.
- 2. voluntary family planning is a cost-effective adaptation and mitigation measure for addressing climate change.
- 3. although current global responses to climate change are mostly mitigation approaches through technical innovations and economic frameworks such as Clean Development Mechanisms (CDM), these responses need to be integrated with stabilization of the world's population.
- 4. all the impacts of climate change including rising sea levels, extreme weather, increased frequency of flooding and drought will affect crop yields, access to sanitation, safe water, poverty and hunger, and health; and are major obstacles to sustainable development.
- 5. climate change affects countries and people disproportionately; most severely the disadvantaged, poor and marginalized including women, children, smallholder farmers, indigenous people and minorities, who have contributed least to climate change.
- 6. emphasis must be given to adaptation efforts for the lives of those who are vulnerable to climate change. Such efforts include the empowerment of women, universal access to reproductive health, access to education, strengthening of

health care systems, the utilization of traditional knowledge, climate friendly agricultural production technologies, agricultural wastes treatment and effective water uses. This would also address the unmet needs for voluntary family planning of 215 million women and the increasing number of young people.

#### We, as parliamentarians, appeal:

to governments and the international community to recognize that resolving population issues as described in the Cairo Programme of Action on Population and Development is essential for effective adaptation to climate change, and that empowerment of women, reduction of poverty and universal access to RH/FP services are indispensable elements of this programme.

# We, as parliamentarians, appeal to the heads of state and government leaders at the 2010 G8 Canada Summit:

- 1. to tackle the population and reproductive health issues which are imperative to address global challenges; including human rights, justice, high rates of maternal mortality and morbidity and the threat of HIV/AIDS, which are public health problems.
- 2. to ensure universal access to reproductive health especially voluntary family planning is a recognized driver to protect the health of all and for creating a society which can preserve human dignity. This was agreed on at the ICPD held in Cairo in 1994, and it is our common goal beyond creeds and ideologies to reach the MDGs by the year 2015.
- 3. to recognize that the poor especially women and children in developing countries, will suffer the most and first from climate change and have the least resources to deal with it. Universal access to reproductive health including voluntary family planning coupled with capacity-building and advancement, will aid their effort for climate change adaptation.
- 4. to promote maternal health as outlined in the Consensus for Maternal, New born and Child health and ensure the inclusion of universal access to reproductive health services, including family planning. As at previous G8 summits, including Toyako and L'Aquila, the G8 countries and government leaders should hold themselves responsible for leading the international community.
- 5. to invest in health system strengthening, including maternal, child and reproductive health, and to include civil society as partners.
- 6. to urge all members to participate effectively in the Kyoto and Copenhagen processes.

# List of Participants

#### **Members of Parliament**

1.	Hon. Ly Son Cambodia
2.	Hon. Fatang Song, Vice-Chair of ESCPHChina
3.	Hon. Xin FangChina
4.	Hon. Prof. P.J. Kurien, Vice-Chair of AFPPD; Chair of IAPPDIndia
5.	Hon. Avinash Rai KhannaIndia
6.	Hon. Ledia Amalia Hanifa Indonesia
7.	Hon. Dr. Surya Chandra Surapaty MPH, PhD Indonesia
8.	Hon. Dr. Mohammad-Javad Nazarimehr Iran
9.	Hon. Yasuo Fukuda, APDA Chair; AFPPD Chair; JPFP Chair; Former Prime Minister
10.	Hon. Chieko Nohno, JPFP Secretary-General Japan
11.	Hon. Yukio Ubukata, JPFP Director Japan
12.	Hon. Serik OspanovKazakhstan
13.	H.E. Thongsing Thammavong, President of the National AssemblyLao PDR
14.	H.E. Pany Yathortou, Vice-President of the National Assembly Lao PDR
15.	Hon. Douangdy Outhachak, LAPPD President; Chair of the Social and Cultural Committee
	Lao PDR
16.	Hon. Dr. Somphou Doaungsavanh, Vice-Chair of the Social and Cultural Committee Lao PDR
17.	Hon. Prof. Dr. Phonethep Pholsena, Vice-Chair of the Social and Cultural Committee Lao PDR
18.	Hon. Dr. Ty Phommasack, Vice-Minister of Agriculture and Forestry Lao PDR
19.	H.E. Khempheng Pholsena, Minister of Water Resources and Environment Administration
	under the Prime Minister's Office Lao PDR
20.	Hon. Thonphan Chanthalanone, Chair of the Ethnic Committee Lao PDR
21.	Hon. Khamveo Sikhothchounlamly, Chair of the Defence and Security Committee Lao PDR
22.	Hon. Dr. Khoukeo Akhamonty, Vice-Chair of the Foreign Affairs Committee Lao PDR
23.	Hon. Dr. Bang On Sayarath Lao PDR
24.	Hon. Vanpheng Keonakhone Lao PDR
25.	Hon. Prof. Dr. Boungnong Boupha Lao PDR
26.	Hon. Thonekeo Phanthavong Lao PDR
27.	Hon. Intha Saymoonkham Lao PDR
28.	Mr. Somphien Xayadeth Lao PDR
29.	Ms. Sisay Luedethmounsone, Chair of the Lao Women's Union Lao PDR
30.	Mr. Lytou Bouapao, Vice-Minister of Education Ministry Lao PDR
31.	Ms. Vanhthone Phonnasane, Representative of Lao Women's Union Lao PDR
32.	Ms. Bouachanh Syhanath, Representative of Lao Women's Union Lao PDR
33.	Prof. Dr. Eksavang, Representative of Public Health Lao PDR

34.	Hon. Dr. Tan Seng Giaw	Malaysia
35.	Hon Dato' Abd Rahman Dahlan	Malaysia
36.	Hon. Rama Guragai	Nepal
37.	Hon. Dr. Rajendra Prasad	New Zealand
38.	Hon. Prof. Dr. Pinit Kullavanijaya, AFPPD Secretary-General	Thailand
39.	Hon. Dr. Viratt Panichabhongse	Thailand
40.	Hon. Dr. Nguyen Van Tien, Vice-Chair and Secretary-General of VAPPD	Vietnam
41.	Hon. Dr. Ho Thi Thu Hang	Vietnam
42.	Hon. Do Manh Hung	Vietnam
43.	Hon. Nguyen Thi Sang	Vietnam

# Resource Persons, International Organizations & National Committees & Additional Delegates

44.	Dr. Adrian C. Hayes, Development Specialist at the Australian National University Australia	
45.	Ms. Mith Chanlinda, Vice-Chief of Protocol Department, National Assembly Cambodia	
46.	Mr. Wu Zhang, Deputy Director-General of the Population, Public Health and Sport Office	
	of ESCPHChina	
47.	Mr. Yonghai Mu, Staff of the General Office of ESCPHChina	
48.	Mr. Aixin Sun, Staff of the General Office of ESCPHChina	
49.	Mr. Lei Li, Staff of the General Office of ESCPHChina	
50.	Mr. Manmohan Sharma, IAPPD Executive SecretaryIndia	
51.	Mr. Bagdaulet Turekhanov, Chief Expert of the Department of International Affairs and	
	Protocol of the Secretariat of Mazhilis of the ParliamentKazakhstan	
52.	Ms. Mieko Yabuta, UNFPA Country Representative Lao PDR	
53.	Mr. Pheuiphet Sadaoheung, Member of the Ministry of Energy and Mines Lao PDR	
54.	H.E. Masaaki Miyashita, Ambassador to the Lao PDR, Embassy of Japan Lao PDR	
55.	Mr. Shigeru Omori, Minister, Embassy of Japan Lao PDR	
56.	Mr. Ken Nakamura, First Secretary, Embassy of Japan	
57.	Ms. Akiko Tomita, Second Secretary, Embassy of Japan Lao PDR	
58.	Mr. Yoshiharu Yoneyama, Senior Chief Representative, JICA Laos Office Lao PDR	
59.	Ms. Yuki Yoshimura, Representative, JICA Laos Office Lao PDR	
60.	Dr. Anna Klinken Whelan, IPPF-ESEAOR Regional Director	
61.	Ms. Shazlin Khalil, Accompanying Officer Malaysia	
62.	Ms. Angela Nielsen, Project Coordinator for NZPPD; Family Planning International	
	New Zealand	
63.	Mr. Ramon San Pascual, PLCPD Executive DirectorPhilippines	
64.	Mr. Najib Assifi, APRO Deputy Director; UNFPA Thailand Representative	
65.	Ms. Roohi Metcalfe, Gender Specialist at UNDP RCBThailand	
66.	Mr. Shiv Khare, AFPPD Executive DirectorThailand	

67.	Ms. Kanlapaphruek Kokeatimanon, AFPPD Administrative Associate	.Thailand
68.	Mr. Tammavit Tasnavites, AFPPD Programme Associate	.Thailand
69.	Mr. Mohammad Naghi, Representative from the Embassy of Iran in Thailand	.Thailand
70.	Dr. Nguyen Duc Thu, Vice Executive Director of VAPPD	.Vietnam
71.	Mr. Mai Xuan Son, VAPPD Officer	.Vietnam
72.	Dr. Vo-Tong Xuan, Professor of Agronomy and Rector Emeritus at Angiang University	.Vietnam

#### LAPPD, Lao National Assembly and Government Representatives

73.	Mr. Chanpheng Bouasavanh, General Director of Social and Cultural Department Lao PDR
74.	Mr. Herseng Yiapaoher, Deputy Director of Social and Cultural Department Lao PDR
75.	Ms. Manivanh Vongsamolaphom, Deputy Director of Social and Cultural Department Lao PDR
76.	Ms. Suanesavanh Muongmany, Deputy Director of Foreign Affairs Department Lao PDR
77.	Ms. Sousada Phommasak, Director of SELNA Lao PDR
78.	Mr. Khamsy Senghalath, Deputy Director of Defence and Security Department Lao PDR
79.	Ms. Thavisay Phasathanh, Deputy Director of the Administration and Finance
	Department Lao PDR
80.	Mr. Bounlert Loungdouangchanh, Head of LAPPD Secretariat Lao PDR
81.	Mr. Khampeng Vilaphane, Deputy of Head of Lao National Assembly Office Lao PDR
82.	Mr. Bounsern Sengmany, Secretary to the President of the National Assembly Lao PDR
83.	Mr. Viengkeo Vanhnachak, Secretary to the Vice-President of the National Assembly Lao PDR
84.	Mr. Bounsavanh Xayavong, Secretary to the President of the National Assembly Lao PDR
85.	Ms. Sivaly Savathdy, LAPPD Secretariat Lao PDR
86.	Ms. Khonesavanh Thammavong, National Assembly Technical Official Lao PDR
87.	Mr. Khamthen Vilakhoun, Deputy Director of the Center for Information and Library Lao PDR
88.	Mr. Latsamy Khonesavanh, Head of Protocol Division Lao PDR
89.	Mr. ChanKhao Philalom, Head of Protocol Division from Ministry of Foreign Affairs Lao PDR
90.	Mr. Soukamay Xayasith, Master of Ceremony Lao PDR
91.	Mr. Khampasong Lathsachack, SELNA Manager Lao PDR
92.	Ms. Sabine Meihlau, Advisor to the Social and Cultural Affairs Committee Lao PDR
93.	Mr. Sisouvanh Somphet, Head of Finance Department Lao PDR
94.	Mr. Monephet Sisomphone, Technical Official Lao PDR
95.	Mr. Sithanome Phommachanh, National Assembly Technical Official Lao PDR
96.	Mr. Phouthong Panyaboun, National Assembly Technical Official Lao PDR
97.	Ms. Vinavanh Sipaphay, National Assembly Technical Official Lao PDR
98.	Mr. Phidavone National, Assembly Technical Official Lao PDR
99.	Mr. Soulichanh Xengvong, National Assembly Technical Official Lao PDR
100.	Ms. Syamphone National, Assembly Technical Official Lao PDR
101.	Mr. Inthong, National Assembly Technical Official Lao PDR

102.	Mr. Vilaphat, National Assembly Technical Official	Lao PDR
103.	Ms. Khotamy Savathdy, Technical Official	Lao PDR
104.	Mr. Vilayvong Sichanhthongthip, Head of Construction and Vehicle Control Division	Lao PDR

#### APDA

105.	Dr. Osamu Kusumoto, Secretary-General/Executive Director of APDA Japar
106.	Ms. Hitomi Tsunekawa, International Affairs Manager of APDA Japar
107.	Ms. Katie Dönszelmann, International Affairs Programme Associate of APDA Japar
108.	Mr. Junichiro Tanaka, Special Services Japar

#### Interpreters

109.	Ms. Akiko Ninagawa	Japan
110.	Ms. Mari Yamada	Japan
111.	Ms. Shiho Kawamura	Japan
112.	Mr. Dethsada	Lao PDR
113.	Mr. Thongphankham	Lao PDR

#### List of Acronyms

AFPPD	Asian Forum of Parliamentarians on Population and Development
ANU	Australian National University
APDA	Asian Population and Development Association
ASEAN	Association of Southeast Asian Nations
BPL	Below Poverty Line
CBDR	Common but Differentiated Responsibility
CC	Climate Change
CDM	Clean Development Mechanism
CEDAW	Committee on the Elimination of Discrimination Against Women
CO2	Carbon Dioxide
СОР	Conference of Parties
COP16	16 <sup>th</sup> Conference of the Parties
CPR	Contraceptive Prevalence Rate
ESCPH	The Education, Science, Culture and Public Health Committee of the NPC
ETS	Emissions Trading Scheme
FP	Family Planning
FWCW	Fourth World Conference on Women
GCPPD	Global Committee of Parliamentarians on Population and Development
GDP	Gross Domestic Product
GEF	Global Environment Facility
GGCA	Global Gender and Climate Alliance
GHG	Greenhouse Gas
IAPPD	Indian Association of Parliamentarians on Population and Development
ICPD	International Conference on Population and Development
ICPD PoA	ICPD Programme of Action
ICPPD	International Conference of Parliamentarians on Population and Development
IFAD	International Fund for Agricultural Development
IFPPD	Indonesian Federation of Parliamentarians on Population and Development
IMR	Infant Mortality Ratio
IPCC	Inter Governmental Panel of Experts on Climate Change
IPCI/ICPD	International Parliamentarians' Conference on the Implementation of the ICPD Programme of Action
IPPF	International Planned Parenthood Federation
IPPF-ESEAOR	IPPF East and South East Asia and Oceania Region
IPU	Inter-Parliamentary Union
IT	Information Technology

JPFP	Japan Parliamentarians Federation for Population
LAPPD	Lao Association of Parliamentarians on Population and Development
LDCs	Least Developed Countries
MC	Master of Ceremonies
MDGs	Millennium Development Goals
MMR	Maternal Mortality Ratio
MP	Member of Parliament
NAPAs	National Adaptation Programmes of Action
NGO	Non-governmental Organization
NGPES	National Growth and Poverty Eradication Strategy
NPC	National People's Congress
NPO	Non-profit Organization
NZPPD	New Zealand Parliamentarians' Group on Population and Development
ODA	Official Development Assistance
PDR	People's Democratic Republic
PLCPD	Philippine Legislators' Committee on Population and Development
РоА	Programme of Action
PPPs	Public Private Partnerships
RH	Reproductive Health
SELNA	Joint Programme of Support to an Effective Lao National Assembly
SRHR	Sexual Reproductive Health/Rights
STD	Sexually Transmitted Disease
TFR	Total Fertility Rate
UN	United Nations
UNDP	United Nations Development Programme
UNDP RCB	UNDP Regional Centre in Bangkok
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change
UNFPA	United Nations Population Fund
UNFPA APRO	UNFPA Asia and Pacific Regional Office
UN-REDD	The United Nations Collaborative Programme on Reducing Emissions from Deforestation and Forest Degradation in Developing Countries
VAPPD	Vietnamese Association of Parliamentarians on Population and Development
WEDO	Women's Environment and Development Organization
WHO	World Health Organization