Report of the International Workshop on Skewed Sex Ratios at Birth: Addressing the Issue and the Way Forward

Ha Noi, Viet Nam
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UNFPA

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List of abbreviations

CEDAW: Convention on the Elimination of All Forms of Discrimination against Women

GBV: Gender Based Violence

GDI: Gender Development Index

GDP: Gross Domestic Product

ICPD PoA: Programme of Action of the International Conference on Population and Development Programme of Action

ICPD+5:   The five-year review of the ICPD PoA in 1999

IFAD: International Fund for Agricultural Development

ILO: International Labour Organization

MDG: Millennium Development Goals

OHCHR: Office of the High Commissioner for Human Rights

PC PNDT: Pre-Conception and Pre-Natal Diagnostic Technique

RoK: Republic of Korea

SRB: Sex Ratio at birth (ratio male/female births in a population, multiplied by 100)

TFR: Total Fertility Rate – the number of children a woman can be expected to have over her lifetime

UNCT: United Nations Country Team

UNDAF: UN Development Assistance Framework

UNDP: United Nations Development Programme

UNESCO: United Nations Education, Science and Culture Organization

UNFPA: United Nations Population Fund

UNICEF: United Nations Children's Fund

UN Women: United Nations Entity for Gender Equality and the Empowerment of Women

USD: United States Dollars

WHO: World Health Organization

Executive summary

Format of the workshop: The workshop was organized by the Ministry of Health of the Socialist Republic of Viet Nam and the United Nations Population Fund (UNFPA), on 5-6 October 2011 in Ha Noi.

The purpose was to address the issue of imbalance in the sex ratio at birth (SRB), in particular:

- To take stock of varying geographic trends and country situations;
- To share country, United Nations and other stakeholders' experience in responding to the issue; and,
- To lay the groundwork for a platform for south-south cooperation in sharing experiences and technical assistance.

The workshop was addressed by *Mr. Nguyen Thien Nhan, Deputy Prime Minister*, speaking on behalf of the Prime Minister of the Socialist Republic of Viet Nam. Workshop participants included government officials, civil society, academia and media representing eleven countries, as well as representatives of United Nations organizations at country and headquarters level. Participants ranged from grass-roots workers to high level government officials, providing an opportunity for dialogue amongst a very wide range of stakeholders.

The programme began with an introduction to the overall situation, followed by presentations of eleven country specific situations. Examples of the United Nations response at global and national level were presented. The workshop concluded with a discussion of recommendations for the future.

Background for the workshop: In recent decades, the issue of increasingly imbalanced SRB has caused concern, starting in a number of Asian countries, but now also spreading beyond that region. Country level attention to the issue often has begun with an analysis of demographic trends, e.g. census results in China and India, starting in the 1980s.

Much has been undertaken in affected regions, by governments, civil society, communities and academia, to halt the trends and to address human rights, social policy and public health dimensions. At the international level, the issue was addressed in the 1994 Programme of Action of the International Conference on Population and Development Programme of Action (ICPD PoA). Given its mandate in population dynamics, the UNFPA has focused on the issue starting in the 1900s, first at country and then, regional levels. Thus, it has organized a number of international workshops since 1994 to allow countries to share experiences. Given the fact that this is a highly complex issue, United Nations agencies have developed an interagency statement which builds on the respective mandates of the agencies concerned, as a result of a process starting with a workshop at World Health Organization (WHO) headquarters in 2009.

As for many other emerging issues, country-level sharing of experiences and south-south cooperation can be useful. Thus, this workshop was planned to feed into, and advance, an overall process that began to gather speed beginning in 1994.

Proceedings of the workshop: The workshop received high level and public attention, both from the host country and from participants, and the content was very rich and dynamic. This indicates a clear development over time - both for better analysis, for generating commitment and for breaking taboos. As noted by one of the speakers, five years ago, it might not have been possible to hold such a workshop.

With respect to **trends,** the issue of imbalances in SRB is affecting a growing number of countries, with great variation within countries and over time. Presenters noted repeatedly that trends, and their analysis, become much clearer with a careful disaggregation across geographical, socio-economic, educational and birth order strata.

The phenomenon complements the much older phenomenon of sex selection after birth. For some countries, it is difficult to distinguish the two, since data are incomplete. Several presenters gave estimates of the relative contributions, with prenatal sex selection estimated to account for the major part (order of magnitude of 80 per cent) to the 'missing girls' phenomenon. Comparison between the prenatal and postnatal levels can be useful to discern trends.

The presentations for some of the countries indicated that trends are not yet conclusive, but that pre-conditions exist and it is important to identify early warning metrics. Most of the affected countries show an increasing imbalance over time. The one exception at national level is the Republic of Korea (RoK), and several counties (e.g. China, India, Viet Nam) show apparent leveling off or reversal in some sub-national regions.

With respect to **determinants,** an explanatory framework has been developed and perfected over the last 10-20 years, which identifies three preconditions for SRB imbalance:
- 'Son preference';
- Low or decreasing fertility; and,
- Availability of technology.

This framework was found very useful in organizing the analysis of determinants. There was general agreement that son preference is the root cause, and this has implications for response. The relative weight of each pre-condition may vary with time and with the country situation.

Many presentations indicated that 'modernization' may not always bring improvements in the trends; in fact, the opposite may be true at least in the short term. Some of the factors mentioned to support that conclusion by the presenters included that:
- Urban, highly educated and well-to-do women may be the first to take advantage of new technologies (e.g. family planning and sex selection technologies). With time their innovative behaviour is diffused to other groups.
- Countries in transition may see a temporary decline in the effectiveness of regulation of medical practices, including sex selection where it is illegal, and this is compounded by the rapidly increased availability of such technologies, including in virtual markets.

- Modernization transitions entail a trend away from reliance on extended family support toward reliance on the nuclear family, while public support systems, e.g. pensions, are not yet well established.

Presenters indicated that the explanatory framework presented in one of the sessions should be maintained and further refined. This includes the need for a further unwrapping of the concept of 'son preference' which distinguishes *attitudes* (giving higher value to boys than to girls) from economic and cultural *imperatives* (at times termed 'son compulsion', where the cultural and economic institutions of societies mean that survival is seen as dependent on having sons), from the actual *practice* of sex selection. Much focus was also given to the need for un-wrapping the different cultural expressions of masculinity.

With respect to **consequences,** there was as yet limited robust evidence of the effects on women, and indeed most of the presentations dealt with the long term effects for men - both the 'marriage squeeze' beginning 20-30 years after birth and the 'retirement squeeze' after 60-70 years. One could see this as a 'perfect storm' of demographic trends – with decreasing fertility, sex ratio imbalance and urbanization together expected to impact not least on poor, rural men in remote areas, who may wind up with no family support. However, several participants were also concerned that the attention given to the consequences for men should not lead to our perceiving women in an instrumental manner.

With respect to **response**, participants expressed an overwhelming need for better data and research. Many countries have undertaken extensive measures to meet the challenge, especially over the last 10-20 years. Most country experiences address both supply (regulation of technology) and demand (reductions of son preference). The former takes the form of regulating access to technology and various levels of enforcement of this regulation. Measures to reduce demand include both short term measures, such as conditional cash transfers for parents of daughters or advocacy campaigns, but also more long term efforts, such as policies to increase empowerment of women and improve pension systems.

Several presentations noted the risks involved in advocacy campaigns. Examples mentioned the importance of ensuring that they do not reinforce gender stereotypes, or overly dramatize the situation and that a balance is drawn between individual and collective interests. In particular, it is important that regulation does not lead to reduced access to safe abortion, where it is legal.

Presentations noted that most efforts to date have had limited success, either with respect to limiting supply or of demand. However, although it is difficult to draw a clear line of causality, several presenters expressed cautious optimism, as some countries, or regions of countries, may be seeing a reversal of trends. The only country with national reversal of trends remains the RoK. In that country, the increase in the imbalance over the 1980s happened at a time when son preference was decreasing, fertility was decreasing and the availability of technology was increasing. The subsequent reversal to 'normal levels' in the 1990s was characterized by continued decreasing son preference, stricter regulation of technology and continued declines in fertility. However, the RoK experience might not apply to other countries since the RoK was at much higher levels of development than other countries with the same levels of SRB imbalance.

Several countries and United Nations response at country level have identified sex ratio imbalance as an indicator of gender equality and have taken this as an opportunity to review their development plans and place more emphasis on measures which promote gender equality. As one participant noted, they have identified sex ratio imbalance as a thermometer, rather than as an illness in itself, and indeed it can help to focus on and address many underlying tendencies and issues in society. In at least three countries - China, India and Viet Nam - the United Nations has focused on the issue via incorporation in country programmes, e.g. United Nations Development Assistance Framework (UNDAF).

Given the fact that this is a highly dynamic field, **recommendations** focused on:
- Improving data for surveillance of trends and the effectiveness of response;
- Further elaboration of the explanatory framework, including how its application may change over time and in different geographic regions (e.g. outside Asia) and especially more qualitative data to explain dynamics;
- Establishing a platform for sharing experiences, e.g. a network of research institutions;
- Continued, and preferably regular, sharing of experiences through workshops such as this;
- Technical exchange (consultancies) among countries, both on good and challenging experiences; and,
- Development and sharing of better advocacy platforms.

Introduction – Background to the workshop

Sex ratio at birth is defined as the ratio of male to female births in a population, multiplied by 100.[1] The ratio can vary somewhat due to biological factors, but its 'normal' value usually ranges from 104-106, with a few populations ranging between 102 and107.

However, in recent decades, ratios higher than normal - as high as 130 or above - have been observed. The trends are causing increasing concern, starting in a number of Asian countries but are now also spreading beyond that region.

Country level attention to the issue often begins with analysis of demographic trends, e.g. census results in China and India, starting in the 1980s. Much has been undertaken in affected regions, by governments, civil society, communities and academia, to halt this increasing sex ratio imbalance and to address human rights, social policy and public health dimensions.

At the **international level**, the 1994 ICPD PoA, referred to the issue of sex ratio imbalance and established a framework for response. Given its mandate in population dynamics, UNFPA has focused on the issue for some decades, first at country and then regional levels. Thus, in 1994, it organized an international workshop in Seoul, RoK where a number of country experiences were presented. This was followed by other international workshops, including in Beijing, China in 2004, and in Hyderabad, India in 2007. These possibilities for sharing experiences, analyzing root causes, and debating and demystifying response have been found very helpful, including in identifying early signals of upcoming trends.

Given the fact that this is a highly complex issue, United Nations agencies - the Office of the High Commissioner for Human Rights (OHCHR), UNFPA, the United Nations Children's Fund (UNICEF), United Nations Entity for Gender Equality and the Empowerment of Women (UN Women) and WHO - in 2011 developed an interagency statement, including a framework for action for what each agency may do to contribute (see session of the workshop on "United Nations commitment to addressing SRB").

The ICPD PoA also identifies **south-south cooperation** as an important development instrument and resource mobilization objective. As indicated above, it can play a particularly important role in approaching emerging issues, where sharing of experiences can be crucial in understanding complex patterns.

Thus, this workshop feeds into an overall process that commenced in 1994.

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[1] Note that in India, the sex ratio is computed the other way around, as the ratio of girls to boys. For further details on definitions see Annex IV.

Sex selection can occur both before and after birth. In fact, imbalances in the SRB are often complemented by a much more long term trend of imbalances in mortality rates, as well as in the whole population. Thus, some of the countries concerned have seen imbalances in the total population which were as skewed 50-100 years ago as they are today. However, the issue of sex ratio imbalance at birth has mostly developed over the last few decades and has to some extent served as a sentinel indicator, which has drawn attention to the wider issue. This meeting, therefore, focuses on the deliberate and consistent actions with the intention of eliminating large numbers of one sex before birth, resulting in long lasting and major demographic imbalances.

Session 1: Laying out the objectives and goals

Introduction: *Mr. Dinh Huy Duong, Deputy Director, Personnel Department, General Office of Population and Family Planning, Viet Namese Ministry of Health,* welcomed all participants and expressed his appreciation for this opportunity for dialogue. He noted the good cooperation between the Ministry of Health and UNFPA in identifying the trends in Viet Nam and for organizing the workshop, and welcomed the possibility for discussions on United Nations policies and programming, sharing of country experiences and in laying the platform for broader south-south cooperation on the issue.

Objectives of the meeting*: Ms. Upala Devi, GBV Technical Advisor, UNFPA New York,* described the objectives of the meeting:

- To take stock of varying geographic trends and country situations;
- To share country, United Nations and other stakeholders' experience in responding to the issue; and,
- To lay the groundwork for a platform for south-south cooperation in sharing experiences and technical assistance.

Opening remarks: The meeting was deeply honoured to be addressed by and benefit from the presence of *Mr. Nguyen Thien Nhan, Deputy Prime Minister*. Speaking on behalf of the Prime Minister of the Socialist Republic of Viet Nam, Professor Nhan expressed his welcome to the meeting participants, both domestic and international.

Professor Nhan went on to describe some of the progress made in Viet Nam in the last 50 years of implementation of a population and family planning policy. Fertility and population growth rates have been significantly reduced and reproductive health and maternal and child health have been greatly improved. Health care, education and economic development have seen great improvements. In 2010, the Viet Nam gross domestic product (GDP) per capita stood at $ 1,136 United States dollars per year, and universalization of secondary school (that is, a minimum nine years of education) has been achieved. Since 2006, all children below six years of age receive free health care.

However, there are also a few challenges. The average fertility is around two, but there are disparities across regions. The SRB has increased from 105 in 1979, to 106 in 1989, to 107 in 1999, 110.5 in 2009 and 111 in 2010. If additional measures are not undertaken, it could rise to 113 in 2015 and 115 in 2020, and by mid-century, men will outnumber women between 2.3 and 4.3 million. This may cause social problems.

The government takes this issue very seriously and aims to achieve a biologically normal level within the next 10-15 years. Therefore, Professor Nhan expressed great appreciation for the initiative of the Ministry of Health - in cooperation with UNFPA and the Viet Nam One United Nations Country Team (UNCT) - for having organized the present workshop. He hoped to learn both from successes and failures in addressing the problem and that this could help Viet Nam to reshape its policy on family development issues, thus making the nation safe and sustainable.

He also noted that the challenges bear some resemblance to those faced on issues related to environment: what may be seen to benefit the individual in the short term may not be sustainable for the nation long term. Thus, every family must be convinced that a balanced sex ratio is healthy both for them and for the nation.

Ms. Nobuko Horibe, Director, UNFPA Asia-Pacific Regional Office, Bangkok, thanked the Government of Viet Nam and the Viet Nam UNCT for the preparations for the meeting. She noted that the issue of sex ratio imbalance will impact future generations, and some of the demographic consequences may be exacerbated by a tendency in Asia for women to marry later or not at all. Yet, it has taken some time to address it since like many other areas of reproductive health, it is a sensitive issue where it is necessary to break taboos.

Several countries have addressed the issue for some time, including China, India and now Viet Nam and Nepal, and Ms. Horibe extended her compliments for these actions. They include restriction on advertising technology but also measures to address the root causes of economic and cultural preference for sons.

In the future, there is a need for better data, both quantitative and qualitative, and to work with a wide range of stakeholders - such as health providers and communities - both with advocacy purposes and for programming. The United Nations interagency statement states the support of the United Nations organizations in general, and UNFPA, for its part, reaffirms its commitment to try to support countries to help end this phenomenon.

Mr. Eamonn Murphy, United Nations Resident Coordinator a.i., Viet Nam, congratulated the organizers, as well as the participants from different countries. He noted that many problems may be associated with sex ratio imbalance, including that scarcity of women may lead to their marrying at younger ages and that examples of women and girls being trafficking and/or subjected to forced marriages have already been observed. Sex selection has been illegal in Viet Nam since 2003, and there is a pilot project to address it. A broad based approach is needed, including initiating social security schemes for the elderly and improving the social role of women and their empowerment in the family and in society. He also reiterated the importance of more qualitative research to understand the social and cultural reasons behind the phenomenon.

In Viet Nam, the United Nations is committed to the issue and considers that SRB is a key indicator for monitoring progress towards the third Millennium Development Goal (MDG).

Session 2: Upcoming regional trends and implications
Sex imbalances at birth: trends, consequences and policy implications

Mr. Christophe Guilmoto, international technical expert, Paris, presented an overview of the situation.

With respect to **trends**, he noted that SRB is rather constant across populations, generally in the range of 104-106. However, a number of populations have experienced elevated sex ratios.

The trend has shifted geographically over time: thus it began in a number of Asian countries (China, India and the RoK) in the 1980s, followed by some countries of the Caucasus (Azerbaijan, Armenia and Georgia) in the 1990s and has more recently been followed by Montenegro, Albania and Viet Nam. Elevated levels generally are in the range 110-120.

Sex ratio imbalance is never equal across parities, social, ethnic, or regional groupings; so disaggregation is extremely important in order to identify and analyze the causes of the imbalance. For example, northwest India has SRB levels much higher than other areas of India, and in Armenia, sex ratio for the first and second child is normal, but for the third and fourth, it is 175.

The observed imbalance could in theory be due to under-enumeration, a wide variety of biological factors, or deliberate action (usually in form of sex identification of the fetus, followed by sex selective abortion). Although all factors play a role, Mr. Guilmoto noted that under-enumeration can usually be estimated by a variety of techniques (including the disaggregation mentioned above), and studies on biological factors generally show they inadequately account for the imbalance. Thus, most of the trend can be attributed to deliberate action.

A more difficult topic is to distinguish prenatal from postnatal sex selection, especially in populations where SRB is not registered. Mr. Guilmoto estimates that in the 14 countries most affected, out of the total number of missing girls (which he estimates at 39 million under the age of 20) he estimates that almost 20 per cent go missing postnatal. For example, in India, 271 thousand go missing after birth.

With respect to the **causes** of the imbalance, Mr. Guilmoto presented an explanatory analytical framework: since the 1980s, deliberate sex selection usually occurs in populations where three pre-conditions come together for those who make the decision:
- Access to the necessary technology for selection ('It is possible');
- Low or decreasing fertility ('It is necessary'); and,
- Son preference due to a variety of socio-cultural factors in patrilineal/patrilocal societies, e.g. the importance of having a male heir to continue the family line or economic support in old age ('It is worthwhile').

The **consequences** are still not fully known. However, some that may be foreseen include a 'marriage squeeze' - when the imbalanced birth cohorts reach marriageable age at 20-30 years. Some of this is inevitable: even if SRB were to revert to normal levels immediately, 10-15 per cent of men would be forced to remain unmarried. The consequences for the marriage market will be cumulative, as men who remain unmarried remain on the market. The impact is likely to be more pronounced for men from low income groups.

In terms of **response**, governments can, and have, acted on each of the three factors mentioned above. For example:

- Regulating access to sex determination and emerging technologies, e.g. controlling illegal abortions;
- Ending policies which discourage or restrict births; and,
- Addressing 'son preference', either via short term measures (e.g. subsidizing girls with conditional cash transfers and affirmative action,) or more long term measures (e.g. changing laws on family, inheritance or employment, thus impacting patriarchal structures and attitudes and improving the status of women).

In terms of **success stories**, so far, the RoK is the only one where SRB has reverted to normal levels at the national level.

With respect to **challenges for the future**, Mr. Guilmoto noted that there are some worrying trends with the phenomenon spreading across countries to regions previously unaffected. In particular, he mentioned the need for:

- Better understanding of the 'weak spots' of patriarchy, which may vary in different countries (inheritance, marriage constraints, etc.) to help guide interventions;
- Monitoring deterioration in birth masculinity in new vulnerable regions or countries (early warning signals); and,
- Assessing the effectiveness and the direct and indirect impact of policy interventions.

Questions and answers
Chair: *Dr. Bruce Campbell, Country Representative, UNFPA Viet Nam*

One question related to: 'who has the say in sex selection – the collective, the family, couples or the individual?' Mr. Guilmoto noted that it depends on the dynamics of local decision-making. In the past, there was more decision-making at collective levels (e.g. family or the wider community), but this seems to be moving toward the more individual level. However, it is difficult to pinpoint that decision since external environments may also influence individual choice. He noted that whereas abortion is a key factor, making sex selective abortions illegal does not solve the problem since people resort to illegal abortions or travel across borders. In addition, technologies such as Pre-implantation Genetic Diagnosis (PGD) are now available which make it possible to select the sex before pregnancy.

Other questions related to the explanatory analytical framework included the relative weight of each factor, and it was noted that each factor is necessary but not sufficient – e.g. sex selection happens in the Punjab where the total fertility rate (TFR) is over three, whereas in China TFR is much lower, but son preference may have been double as high. It was also noted that the concept of 'masculinity' needs to be unwrapped.

Session 3: Country experiences from Eastern Asia – Viet Nam and China
Sex ratio at birth in Viet Nam
Mr. Nguyen Van Tan, Deputy General Director, General Office For Population and Family Planning, Ministry of Health, Viet Nam

The **trend** in Viet Nam is that SRB has risen gradually: from 105 (1979) to 106 (1989), 107 (1999) to 110 (2005) and with levels fluctuating between 112.1 and 111.2 since then. Geographically, it is 115 in the Red River Delta, 106 in the central highlands, and 130.7 in Hung Yen Province in 2009. Sometimes, urban SRB is higher, sometimes rural is higher. There is a need for further analysis of the correlation with TFR levels. In some areas, the first born even shows a SRB imbalance. It seems the ratio is more normal for the poorest and least educated and higher for the richer, highly educated.

The **causes** are primarily deemed to be deeply-held Confucian values with great importance attached to patrilineal continuation of the family line, including the importance of sons for funeral rites. As the society becomes more market oriented, there is a stronger reliance by the individual on the support of the immediate family, and this may exacerbate the trend.

Expected **consequences** include a marriage market squeeze, migration, trafficking, importation of women, e.g. it is estimated that 85,000 Viet Namese women have migrated to neighbouring countries. The scarcity of women does not improve women's status, and in fact the expectation is that it will increase gender based violence (GBV).

So far, the **response** in Viet Nam has included a public ordinance, including a target to reduce SRB to normal levels by 2020. Efforts include public advocacy, as well as management of technology, including through ensuring that media do not publicize sex selection technologies. A few practitioners have been prosecuted. A pilot programme was established in 11 provinces in 2009, and expanded to 43 in 2010. The imbalance has not continued its upwards trend in the last year, but it is not yet certain whether this is due to the efforts described.

Questions and answers
Chair: *Mr. Luo Mai, Director, National Population and Family Planning Commission of China and Mr. Zheng Zhenzhen, Professor, Chinese Academy of Social Sciences*

Many questions were raised related to disaggregation and correlation – e.g. are there inter-relationships between employment for women and urban/rural differences in the high SRB area of Red River Delta? Are the educated women also the ones who had the fastest TFR decrease? Has this been controlled for in the studies? Mr. Tan noted that there is no research yet to establish the relationship between education, TFR and SRB, but in Viet Nam TFR is not very differentiated by education.

Other questions related to migration: has anything been done to reduce the migration of Viet Namese women to neighbouring countries? Mr. Tan noted that Viet Namese women are free to marry anyone they want, but they are informed about potential risks – e.g. related to trafficking. Mr. Tan noted that new migrants often have less deeply-held Confucian values. Asked whether the rich have more access to technology, Mr. Tan noted that he finds this less likely – it is more likely it is related to inherited values.

Gender imbalance and policy responses: China's experience
Mr. Li Shuzhuo, Director, Institute for Population and Development Studies
Ms. Zheng Zhenzhen
Ms. Yang Juhua, Professor, Renmin University of China

Mr. Luo Mai

The presentation began with the showing of a short **TV clip** produced by UNFPA China, depicting a man who is disappointed at the birth of his daughter. Influenced by the loving care she extends to him throughout life, his mind set is gradually changed, and in old age he arrives at the realization that she is "indeed the best thing that has happened in his life".

In China, the **trend** is that levels have increased from around 107 in the 1982 census to 120 in the 2005 sample survey, but levels seem to have stabilized since then, with a possible decline since 2009. There are many variations (e.g. it is higher for many of the middle provinces, for those with a level of elementary education, for the ethnic Han Chinese and for higher parities). There seems to be a slightly elevated imbalance in infant mortality for girls although the gap seems to be narrowing.

The **causes** are extremely complex. China is undergoing a massive *economic* transition (with reduced poverty but still with large groups of very poor people, e.g. in mountainous areas); a *social* transition (including changing policy on pension, health, education, and with a growing civil society and changing gender roles); and a *demographic* transition (220 million floating population who have left their home more than six months ago, coupled with a trend toward smaller families, with average household size that now stand at about three).

35.4 per cent of couples are covered by the 1 child policy; 53.6 per cent by the 1.5 child policy; 9.7 per cent by the 2 child policy; and 1.3 per cent by the 3 child policy. This yields a total policy of 1.465, and most demographic estimates place actual fertility between 1.5 and 1.6. While abortion has been legal since 1957, beta ultrasound has been widely available since 1980. Sex identification has been illegal since 1994 but is actually quite accessible.

Son preference is deeply rooted, including traditionally-held Confucian values which are strongly patrilineal, emphasizing filial piety. The improving economy may actually contribute since the social security structure (e.g. a pension system) is not yet widely available; yet extended family support is declining as young people move to the cities leaving families behind. Social development policies are still not adequately gender sensitive.

Response: The policy response has gone from being *sector-oriented* in the period 1986-2000, to an increasingly *multi-sectoral* approach over 2000-2006, to a *comprehensive approach* from 2006 onwards, coinciding with the 11th Five-Year Development Plan. For example, national laws and provincial regulations outlawed sex selection already in the 1990s. Gender equity laws have been enacted focusing on economic rights (1994-2005), health rights (1994-2003) political rights (1979-2001) and educational rights (1996-2006). From 2006 onwards, the approach is more cohesive and comprehensive. It is not a single policy but a series of comprehensive campaigns, focusing on social and economic policy, information education and communication, law enforcement, health services and monitoring sex selective abortion. Special action was initiated in 2011 covering six ministries and organizations (National Population and Family Planning Commission, Food and Drug Administration, Ministry of Health, logistics department of the People's Liberation Army, All China Women's Federation). The United Nations has also progressively widened its approach since 2000, and the 2011-2015 China UNDAF has as one of its outputs:

"Improved Government capacity to implement and promote existing laws, policies and regulations designed to reduce the sex ratio imbalance and challenging negative gender stereotypes and discrimination" (with UNICEF, UNFPA, UN Women, United Nations Development Programme (UNDP), WHO, International Fund for Agricultural Development (IFAD), United Nations Educational, Scientific and Cultural Organization (UNESCO) and International Labour Organization (ILO) involved).

Research is ongoing to determine whether the levels are indeed improving and if so why.

Questions and answers
Chair: *Ms. Anuradha Gupta, Joint Secretary, Ministry of Health and Family Welfare, India*

Akin to the previous presentation, many questions related to disaggregation and correlation between variables, including whether the correlation with educational level is universal. It was noted that education is not an independent variable – high income, availability of pensions, urban residence and having an urban *hukou* (residence permit) are usually associated. Other questions related to illegal abortions and how compliance with the law is monitored. It was noted that provinces have established laws on how to monitor at county level, with rather decentralized approaches. Clinics with ultrasound machines are required to post a message that sex selection is illegal, and the ultrasound always needs to be conducted by two doctors at the same time to ensure compliance with the law. Some follow-up has taken place. It was also noted that 14 provinces contribute to 85 per cent of the SRB imbalance.

Session 4: Country experiences from South Asia
Prenatal sex selection in India: mapping government action
Ms. Anuradha Gupta

Government Action: In India, the first government action was a decentralized initiative, undertaken in the state of Maharashtra, which enacted an Amniocentesis Act in 1987. The Pre-natal Diagnostic Techniques Act was enacted in 1994, and amended to include the Pre-conception Techniques in 2003 (PC PNDT). The law regulates testing but does not prohibit it; what is prohibited is the disclosure of the sex of the fetus or asking about it. A particular feature is that it is a 'woman friendly' law – the woman is not blamed if she asks for disclosure; it is assumed that she does so under compulsion from the family. Thus, the law is intended to limit testing and telling, not abortion as such, which has been legal since 1971.

However, it is a big challenge to monitor the implementation - at national, state and district levels - where the Ministry of Health and Family Welfare is active. Massive awareness campaigns, laws to improve gender equity, countering child marriage, sensitization of the judiciary and working with civil society and faith-based organizations are some of the activities undertaken. However, only a total of 875 cases have been prosecuted out of 42,374 registered; 291 cases have been decided and 82 convicted. In addition, 450 machines have been confiscated. A website and a toll-free line have been established. On balance, however, it has not been that effective.

With respect to the causes of the phenomenon, dowries are seen as a major factor in son preference. The system has been prohibited since 1961 but is still prevalent. Many efforts have been made to improve the situation of women which hopefully might also provide incentives to prevent sex selection, e.g. reservation of seats for women in local governance bodies, reservation of spots for employment, improving land ownership laws and providing old age pension for parents of daughters. Another measure is the efforts toward obligatory registration of children. Ms. Gupta noted that the response must be multi-sectoral and involve civil society.

Next steps need to focus more on establishing policies in asset ownership and increase the share of employment for women; improving inter-sectoral coordination since it is a problem that links to many areas related to gender equality; improving gender-awareness of frontline service providers; enhancing the capacity of states to implement the Act; and, start focusing more on the 'virtual markets' for sex selection, as it is a practice that can now easily be conducted beyond national borders.

Finally, exchanges with other countries are essential, as all countries are still in a 'learning mode' of what works.

Prenatal sex selection in India: understanding patterns, consequences and the community response
Mr. Purushottam M. Kulkarni, Demographer, School of Social Sciences, Jawaharlal Nehru University
Mr. Ravinder Kaur, Sociologist, Indian Institute of Technology Delhi
Mr. Subhash Mendapurkar, Director, SUTRA

Trends: In 1981, the child sex ratio (for 0-6 year olds) was 104, increasing to 106 (1991), 108 (2001) and 109 (2011). As elsewhere, the conditional sex ratio (dependent on the sex of previous births) shows an increase in sex ratio, e.g. it is 130 if the two previous births are female. There are about 400,000 sex selective abortions per year, constituting 3.6 per cent of all female births. The trend from the latest census seems to be that the states with the highest imbalance have improved somewhat but also that the phenomenon seems to have spread to states that previously had less imbalance. With respect to the 'missing girls', the estimate is that 87 per cent of them are missing due to prenatal selection, and 13 per cent are missing due to postnatal selection.

Determinants: Age at marriage has gone up, which in principle is a good development but it may have had the unintended consequence that the girl is considered an even more expensive investment and that even more efforts may be needed to safeguard chastity. Although land inheritance laws have changed, practices have not. The practice of dowry seems to be increasing rather than decreasing.

The **consequences** are already becoming visible. There are reports of abduction, trafficking and polyandrous marriage. Men will marry at older ages, meaning that the age gap becomes larger. Cross regional marriages are increasing, which means that women move to a place where they have no support system, although it may also have some positive effects, for example, if the caste system is given less value. It may also mean that poorer men will be

less able to marry, and in the worst case scenario it will lead to large numbers of men who are both unemployed and unmarried ('bare branches'), which might lead to increased violence. Women may turn away from marriage, exacerbating bride shortages.

The **civil society response** has been fully cognizant that this is a very complex issue and, therefore, that solutions need to be multi-faceted and owned at the community level. A few of the elements include: advocacy for implementation of the PC PNDT Act, sting operations to catch violations and trying to move the issue from a family concern to a community concern.

The **Himachal experience** is one such response. The programme has adopted a broad approach dealing with broader reproductive health issues and that engages whole communities. There has been some improvement in sex ratio imbalances in the areas where the programme is working.

It was also noted that there are several pitfalls. Use of instrumental language for women has not helped the cause (e.g. language implying that the main problem is that men cannot marry, or girls are acceptable only because they can support the family too). It was also noted that scare tactics have at times fed into the development of an anti-abortion movement. Challenges include: how to overcome 'medical fraternity' attitudes where physicians protect each other rather than their clients; how to maintain access to safe abortion (where legal), balancing individual versus collective rights; and, how to deal with increasing privatization of health services, where regulation is more difficult. The big challenge is to build a cohesive coalition embracing all the different dimensions.

The next series of presentations below were from countries with less established trends, and where one of the challenges was therefore to identify early warning signals
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Trends in sex selection in Pakistan
Mr. Rabbi Royan, Country Representative, UNFPA Pakistan
Ms. Batool Zaidi, Senior Programme Officer, Population Council, Pakistan

Trends: The population of Pakistan is at 180 million, growing at a fast rate, as it is in the beginnings of a fertility transition. Total fertility has dropped to around four, but there are great disparities (4.8 for women with no education and 2.3 for women with higher education). As is usually the case, women in the richest quintile are closer to reaching their desired family size (they have 0.6 children more than they want) than the poorest (who have 1.6 more than they want.) There is high unmet need and contraceptive prevalence rate is only at 30 per cent. Birth history data show an increase in SRB in urban areas coinciding with the start of the fertility decline two decades ago. As elsewhere, sex ratio for higher order births is more imbalanced (in the range of 115-125), and women from the richest families have the highest SRB. Abortion rates are quite high, 29 per 1,000 women (2002), especially in the more rural provinces of Khyber Pachtunwalia Province and Balochistan (where unmet need is high). Higher mortality rates for girls have been observed. There is no birth registration data, and data from surveys are as yet rather inconclusive.

Reasons to expect sex selection: In much of Pakistan, there is a patriarchal, feudal kinship system, where daughters are seen as an expense. Only 20 per cent of women are in

the labour force – so, they cannot provide old age support. A further reason is that the practice of dowry is increasing.

The Bangladesh country experience
Mr. Arthur Erken, Country Representative, UNFPA Bangladesh
Mr. Dipankar Roy, Deputy Director, Bangladesh Bureau of Statistics

Data are poor, and there are few studies specifically related to sex ratio. Preliminary results from the 2011 census show rather spectacular changes in the sex ratio at various ages since the last census. For example, there are a relatively low proportion of males in early adulthood in contrast to a very high proportion at very young and very old ages. However, different sources show very different patterns, so they are as yet unclear, and the causes could be many and can include:

- A significant increase of external migration, particularly for the male population;
- An improved census coverage of the female population; and,
- A significant decrease of maternal mortality and faster decreasing of female child mortality.

Altogether, the data are inconclusive that there is any sex ratio imbalance. However, some of the prerequisites are there, with a TFR of 2.5 and ready access to at least some of the technology. Clearly, there is a need for further studies.

The Nepal country experience
Mr. Damar Ghimire, Programme Manager, UNFPA Nepal

The trends are not striking at national level, but in the Terai region, some districts have SRBs as high as 111. Furthermore, the groups which have the lowest levels of gender equity are the ones with the highest TFR, so there may be a potential problem as TFR decreases in future.

Nepal has many of the cultural preconditions which have also been mentioned for other countries: e.g. marriage and child bearing as cultural obligations, with high levels of child marriage and son preference due to a patriarchal society where sons are seen as necessary to carry on family lineage, to perform the last rituals and to provide security and dignity. The gender development index (GDI) is low (0.452), and the burden of dowry payments is high. Nepal is also very much influenced by its neighbour - India - especially in border regions of the Terai, with open borders and labour migration.

Also, some surveys show that respondents express son preference, although it has not yet translated into sex selection. Abortion rate are high - between 20 and 60 per cent of gynecological admissions to hospitals being due to complications of abortions.

The government is implementing numerous initiatives intended to improve gender equity. The year 2010 was declared as "the year against GBV", with a multi-sectoral Action Plan formulated and a GBV unit established at the PM's office. GBV coordination Committees have been established at decentralized levels. The Gender Equality Act has been

promulgated in 2006. A Human Trafficking (Control) Act has been introduced in 2007, as well as a Domestic Violence Act in 2009.

Questions and answers
Chair: *Ms. Mandeep Janeja, Deputy Representative, UNFPA Viet Nam and Ms. Tran Thi Van, Assistant Representative, UNFPA Viet Nam*

Again, many questions related to co-variation of variables, e.g. whether education co-varies with income and the difficulties of teasing out variables were noted. The importance of isolating factors related to migration was mentioned. It was noted that Bangladesh is surrounded by regions of India which also have little SRB imbalance, whereas Pakistan is closer to Punjab, which has higher levels. It was noted that many measures have been taken to improve gender equity, but implementation may lag due to inadequate budgets.

Data on postnatal trends seem to indicate that Bangladesh has little imbalance (although some years ago, it did demonstrate an imbalance). Pakistan has slightly higher levels for boys in the first year of life, with mortality at ages 1-4 is higher for girls (the former being more related to obstetric complications, the latter more to preventable conditions such as diarrheal diseases). It was confirmed that sex selection is illegal in Nepal.

Session 5: Experiences from countries with emerging sex ratio imbalance - the Caucasus and the Balkans (including Armenia, Azerbaijan, Georgia and Albania)

The Armenia country experience
Mr. Vahe Gyulkhasyan, Reproductive Health Coordinator, UNFPA Armenia

Armenia has undergone tremendous transformations since the fall of the Soviet Union in 1990. This is also the case for indicators related to reproductive health, which include:
- TFR has decreased from 4.5 in 1960 to 2.5 in 1990, and less than 1.5 since 2000;
- According to the Ministry of Health, abortion rates are constant at around 10-15/1000; however, demographic health survey (DHS) data shows abortion rates falling drastically since 2000 (from 80/1000 to 30/1000);
- SRB was normal in the 1990s but increased to 114-118 in the period since 1997, with third and fourth order births at 160-180; and,
- Several attitudinal surveys show some son preference, e.g. women believe their husband prefer sons, including for the transmission of the family name and as providers of financial support.

Abortion is available on demand in Armenia up until 12 weeks, and there is no legal restriction on sex determination.

Sex ratio imbalance in Azerbaijan: situation analysis
Mr. Teymur Seyidov, HIV & Youth Programme Analyst, UNFPA Azerbaijan

TFR has decreased in Azerbaijan over the last decades, from 4.5 in 1980 to just around replacement 2000 onwards. SRB increased from normal levels in 1990 to 1.17 now, with the phenomenon starting in urban areas and then spreading to rural areas. There is not much attention to the issue yet, and a great need for more quantitative and qualitative data.

There are many possible prerequisites for possible future imbalance, e.g. it is a patriarchal society where sons are believed to be a source of support, security and honour for the family and family name transmission, whereas girls are subject to early marriages (often to close relatives), withdrawal from secondary school, informal (religious) marriages and they are subject to "patronage" resulting in GBV and inter personal violence.

The UNDP Gender Attitudes Report notes that one survey showed that 62.6 per cent of women knew about sex selective abortions, whereas only 27.6 per cent of men knew about it. Ultrasound is readily available at low cost (15-20 USD) and abortion at 60 USD.

The Government is not yet addressing the issue. Initiatives are being largely led by NGOs and the United Nations via working through awareness campaigns and on improving qualitative and quantitative data on SRB.

The Georgia country experience
Ms. Lela Bakradze, Programme Analyst, UNFPA Georgia

The collapse of the Soviet Union resulted in mass migration (400 thousand out of a total population of 4 million) as well as tremendous losses in the GDP. Birth registration has been incomplete since 1990s. Though women have many degrees of equality, violence against women is very high. SRB was around 110 or more since 2000, with a peak in 2008 during the Russian invasion. However, data are still inconclusive.

There are initiatives to increase birth rates, e.g. since 2007, the head of the Georgian Orthodox Church will personally baptize any child of birth order three or more. Irrespective of whether it is for that reason, it was noted that the number of births has increased: in 2007 it was 48,000, in 2009, it stood at 63,000.

Abortion was the main method of contraception during the Soviet period (it is legal) but is gradually being replaced by modern methods of contraception, as is the case in many other former Soviet countries. Sex identification is legal but only for medical/genetic reasons. There is as yet no evidence of prenatal sex selection.

The Albania country experience
Ms. Manuela Bello, Assistant Representative, UNFPA Albania

Albania has a population of 3 million, with an enormous out-migration base (since 1990, about 1.2 million have emigrated). Data on SRB vary according to the source: the census indicates normal values, but registration data indicate that it has increased from normal levels in 1990 to around 113-115 in recent years. The TFR has decreased from 6.8 in 1960 to 3.3 in 1993-1995 (despite a prenatal environment) and 1.6 in 2006-2008.

Abortion was illegal before 1990, under the influence of a prenatal policy, with high illegal abortion rates (some estimates are that 50 per cent of pregnancies resulted in abortion) and the highest maternal mortality ratio in Europe as a result. In 1995, abortion was legalized. There are no laws related to sex selection.

There is a high level of violence against women (about a third of women have experienced physical violence). Inheritance is equal, and a number of laws related to gender equity have been enacted. With regard to son preference, interestingly younger couples prefer sons more than do older couples. Until very recently, the issue of SRB received little attention, but there is more attention now.

Questions and answers
Chair: Mr. Rabbi Royan,

Questions were related to the relative weight of the factors: a) the transition to a market economy with private health care including ultrasound available on request; b) the reduction in TFR precipitated by the regime change; and, c) the revival of traditional value systems suppressed by the socialist regime. No one knows what triggers these factors. In Armenia, one reason given is that the 1989 earthquake resulted in an influx of a great deal of foreign assistance, including ultrasound equipment. It was also noted that traditions do differ between the three countries of the Caucasus, with Georgia and Armenia Christian and Azerbaijan Muslim.

It was also noted that birth registration has deteriorated in all countries since 1990 and that there was a need for more both qualitative and quantitative data.

Closing Plenary: wrap-up of first day and brief outline of next day
Chair: *Dr. Bruce Campbell and Ms. Upala Devi*

Dr. Campbell summed up the first day, noting in particular the high level of attention given to the meeting, including the highly appreciated presence of the Deputy Prime Minister. He noted the great richness of experiences and noted their variety and complexity. Clearly, one of the great needs for the future is better data and meaningful early warning signs.

Ms. Devi concluded by describing the programme for the next day.

Session 6: United Nations commitment to addressing sex ratio imbalance
Presentation of the inter-agency statement 'Preventing gender biased sex selection' - panel with UNFPA, WHO, UNICEF, and UN Women, joint UN India Team response to gender-biased sex selection

Dr. Bela Ganatra, Lead Specialist, Dept. of Reproductive Health and Research, WHO Geneva, noted that the interagency statement has been prepared by a group of United Nations organizations (OHCHR, UNICEF, UN Women, UNFPA and WHO) over the last two years, starting with a meeting convened at WHO headquarters, and the statement has been published by WHO.

It is based on the ICPD principle which recommended in 1994, '…to eliminate all forms of discrimination against the girl child and the root causes of son preference which result in harmful and unethical practices regarding female infanticide and prenatal sex selection…'

The statement notes that availability of technologies for sex determination provides an additional method for sex selection, but this is not the root cause of the problem. Where the

underlying context of son preference does not exist, the availability of techniques to determine sex does not lead to their use for sex selection.

It also notes that States have an obligation under human rights laws to respect, protect and fulfill the human rights of girls and women, and equally an obligation to ensure that these injustices are addressed without exposing women to the risk of death or serious injury by denying them access to needed medical procedures such as safe abortion, where it is legal.

The statement recommends:
- More reliable data, both on trends, their determinants and consequences, and on the effect of response;
- Promoting responsible use of technology, ensuring that this is undertaken without reinforcing inequities or discrimination, or jeopardizes women's access to abortion, where legal;
- Supportive measures for girls and women, both access to information and education, as well as personal security, including protection from coercion;
- Legislation to support gender equity, including implementing policies which address the root causes of son preference, as well as guaranteeing access to safe abortion where it is not against the law, in accordance with the ICPD and ICPD+5 (the five-year review of the ICPD PoA in 1999); and,
- Advocacy, communications and community mobilization.

Ms. Upala Devi noted that UNFPA commitment and history of engagement to this issue goes back two decades. It is based on the ICPD, and the programmatic approach has three pillars: population data for development; sexual and reproductive health; and, gender equality. In recognition of the complexity of the issue, UNFPA has been particularly keen to work in tandem with other United Nations organizations at the country level as well as collaborating closely with WHO and other agencies at global level. Again, based on the ICPD, UNFPA recognizes south-south cooperation as critical for capacity development and technical cooperation.

In *Ms. Katharina Hulshof, Representative, UNICEF India and Ms. Sushma Kapoor, Deputy Regional Program Director, UN Women South Asia's* presentations, they focused on the how the United Nations Team in India - with UNICEF, UN Women and UNFPA, as part of the UNDAF process - has established a joint response to gender biased sex selection and that coincides with the 12th Five-Year Development Plan of the Government. The United Nations advocates for rights of women and girls throughout the life cycle, building on conferences (e.g. ICPD in 1994 and the Beijing Women's Conference in 1995) and conventions (e.g. the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW)).

The joint approach notes the major efforts by the Government of India, as well as that the issue has been recognized as a human rights concern in India, given that it both *reflects* discrimination and *results* in further discrimination. The United Nations sees its role as advocating a comprehensive and coherent policy framework and legal actions that promote gender equality. It supports efforts to shape social norms and address socio-economic determinants of daughter aversion, advocate for laws that uphold rights of women and also

those that stem medical malpractice, including through the promotion of professional codes of conduct. It also supports research. The approach is reflected in UNDAF Goal 17. Each organization is working according to its core mandate and strengths. The approach has given a very helpful focus for work on gender issues within the United Nations system in the country.

Questions and answers
Chair: *Ms. Nobuko Horibe*

Comments related to the fact that it was a positive step that such joint guidelines and action were being undertaken at various levels.

Session 7: Seeking solutions to skewed sex-ratios
Sex ratio at birth transition and the diffusion story: evidence from Republic of Korea
Ms. Heeran Chun, Assistant Professor, Jungwon University, Republic of South Korea

Trends: Birth registration has been positive in the RoK during the period in question. SRB imbalance began in the 1980s, peaked at 115 in 1994 and has since declined to almost normal (106.9 in 2010). As in other countries, SRB has been normal for the first and second child throughout the period, rising to 200-240 for the third/fourth child in the mid-1990s. Levels fluctuate according to the zodiac animal year, as well as regionally and socio-economically.

Determinants and consequences: The imbalance could not have developed in the 1980s without modern technology, coupled with son preference and decreasing fertility. However, there is recent evidence that son preference is fading, or even progressing into daughter preference, especially for younger women. Several factors are identified as causing this change:
- Changes in the 'value' of sons as caregiver/supporters in old age, weakening patrilineal/patrilocal family system;
- Increase in the status of women in society;
- Laws, regulations, and legal/policy actions against gender discrimination and sex selective abortion; and,
- Media and social campaigns.

Both transformations seem driven by diffusion of ideas, with sex determination technology adopted first by better educated, well-to-do (non-manual workers) and urban dwellers. As in other countries, abortion rates increased during the early stages of the fertility transition (1970-1980) but have since declined.

The question is whether these patterns would also apply to other countries which are at different levels of development, given that development has happened at such a rapid pace in the RoK. Much more research needs to be undertaken on the reasons behind the decline in sex-selection. It is still not clear whether it was direct policy interventions or shifts in socio-cultural norms that caused the decline in SRB.

Response - Sex selection in Asia: what policies might reduce it?

Ms. Monica Das Gupta, Senior Demographer, Development Research Group, the World Bank, Washington D.C

The problem may be best addressed by looking at child sex ratios since female infanticide can be indistinguishable from prenatal sex selection. The only regions showing strong son preference are East Asia and South Asia and concentrated in certain regions within countries (north-west India and east-central China). One of the most significant determinants is kinship systems – with some systems making boys more valuable than girls and with striking correlation between kinship systems and missing girls. One of the reasons for the profound effect is that the kinship systems have been codified in legal and administrative systems over centuries, although some are more rigid than others. The major types are:

- Matrilineal system: inherit from mother's side, couples live with mother's side (rare today);
- Bilateral system: inherit from either side, couples live with either side or on their own (found in many pre-modern societies and common in today's urbanizing world); and,
- Patrilineal system: inheritance from father's side, couples live with father's side (found in many pre-modern societies).

Evolving social norms, education and urbanization are changing the norms but modernization (technology) also makes sex selection easier. In the RoK, a decline in son preference happened at the same time as availability of technology increased. Although son preference had declined, the fact that technology became more available at the same time meant that many parents still chose to utilize the technology for some years. However, the RoK had a much higher level of human development than some of the other affected countries, such as China.

The consequences, for China in particular, are that it is likely that a specific group of old, unmarried men in poor provinces will be particularly vulnerable, as they will have neither a wife nor children or social security to support them. It will be important to establish policies which can support this group of people to adapt.

Session 8: Role of civil society to address the issue
Masculinity, gender equality and son preference in Nepal
Mr. Ravi Verma, Regional Director, International Center for Research on Women

The recently conducted research on masculinity in Nepal builds on anecdotal reports and other studies showing men being more willing than women to pursue the birth of sons even if it entails the expense of larger family size. There is a strong stigma and abuse against 'niputar' or sonless women, such as threats by mothers-in-law to send women back to their parental homes if they do not bear sons. Despite legal sanctions, there is increasing use of sex determination technology, especially in areas near India. Sons are preferred for old age, to provide economic support and to continue the lineage; daughters are preferred for emotional support and to share the workload. There is a need to understand men's attitudes and behaviours to inform programmes and policy. The present research shows a correlation between traditional attitudes about women on the one hand (e.g. expressing that 'a woman's primary role is to cook for her family' or that violence against women in the home is acceptable) and son preference on the other hand.

The researchers termed this 'hyper masculinity', and noted the need for redefining norms of masculinity by engaging men and boys, as well as a need to engage with 'positive deviants' to nullify the harmful masculine notions and behaviours. Girls are valued for different reasons and this needs to be brought out in more positive communication and messaging.

The root causes of son preference: Findings from empirical research studies on the rise of sex ratio at birth in Viet Nam
Dr. Khuat Thu Hong, Director, Institute for Social Development Studies, Viet Nam

In Viet Nam, all three prerequisites for sex selection are present, and all are at a high level. This is due to patrilocal living arrangements, lineage issues and because a connection is made between masculinity and having sons (e.g. being teased that you are not 'a real man' if you cannot have sons). On the other hand, daughters are valued for their contribution to the family. It is also noted that bilateral kinship systems do exist in Viet Nam.

On the other hand, many requisites for a good response are also present: a high level of awareness of the negative consequences of sex selection, acceptance of the law against sex selection, as well as interest in learning from the successful lessons of the RoK. Many approaches are being undertaken to foster a positive environment: promoting bilateral kinship models, including that daughters can continue the family line (that is, the children can bear the mother's surname); that daughters also can worship ancestors; and, that sons and daughters inherit equally.

Couples are encouraged to live in the wife's family. There is advocacy for recognition of the value of daughters and measures for improving care for the elderly.

Questions and answers
Chair: *Ms. Ena Singh, Assistant Representative, UNFPA India*

Comments related to the fact that it is important not only to talk of 'saving' girls but also to extend this via creating an environment for 'valuing girls.' It was also noted that we need to 'unwrap' the concept of 'masculinity'.

Session 9: The way forward - Laying the ground for developing a south-south cooperation framework

Group work
Facilitators: *Ms. Upala Devi and Ms. Kiran Bhatia, Gender Advisor, UNFPA Asia-Pacific Regional Office*, noted some of the principles of south-south cooperation as the basis for group work:

- *Nationally owned and demand driven*, so that countries set agendas free of conditionality and sensitive to the national context;
- *Partnerships of equals*, based on trust, mutual benefit and equity;
- Focused on *mutual development* through the sharing of experiences, technology and skill transfers, training and research;
- Committed to results and mutual accountability;
- Actively *complementary* to other modes of international cooperation; and,

- Build on *regional capacities* and enhance regional partnerships, including across regions of the South.

Group Reports
Chair: *Dr. Bruce Campbell and Mr. Christophe Guilmoto*

Group 1: Building evidence and monitoring key trends
The group identified a great need for further understanding of factors behind son preference. Data which address those factors must be integrated in periodic surveys. Data need to be highly disaggregated, allowing for a combination of several factors. Opportunities to include key questions in other surveys than those now being utilized should be pursued, allowing also triangulation between different systems, including micro level such as hospital statistics. Monitoring systems need strengthening, as does sharing of data, good practices and development and dissemination of the specific tools which help collect data and analyze this particular issue. There is a need for improved capacity to analyse and to make alternative projections to sensitize policy makers to their policy choices.

For south-south cooperation, it was noted that, given the many new and unresolved questions involved in this issue it is particularly important to be able to compare data and analyses, and to share new methods of collecting and analyzing data, along the lines of this workshop. A global research network should be established.

Group 2: Advocacy for policy development to address sex ratio at birth - how to do it and what to avoid
The group identified a wide range of stakeholders: national (household and extended family, policy-makers, civil society, researchers and the medical community), regional (e.g. United Nations bodies and the parliamentarian fora) and global (e.g. development partners and the United Nations). Media are a key partner and community level stakeholders are particularly important.

The messages to promote should be tailored to the target audiences, carefully and professionally crafted, using rights-based language. They should be effective (meaning that at times they may be emotional) yet avoid reinforcing stereotypes. They must be culturally appropriate and promote gender equality. The messages which should be avoided are ones which reinforce stereotypes, portraying women only as caretakers and wives. They should avoid taking the SRB issue out of the general context of gender equality, as well as anything which might be seen to restrict access to technology in general e.g. abortion, where legal. It is important also not to swing to daughter preference.

For south-south cooperation, global advocacy and exchange of platforms would be essential.

Group 3: Policies and programmes
The group identified several levels, beginning with the identification of a focal point for action. Laws and actions should be established to curb illegal and unethical use of medical technology. Bringing about changes in son preference through women's education, skill building, employment, asset ownership, inheritance, participation in government and politics

reversing cultural/traditional practices, through communication and incentives (favourable to inheritance of land if children are caring for the wife's parents), conditional cash transfers and old age security laws regarding family name which allow inheritance through the daughter are key determinants.

The importance of monitoring was strongly emphasized, such as improving data as a basis for action, including local data which identify local specificities, allowing tracking of SRB at global/national/subnational level and developing a comprehensive index of son preference and tracking and integrating it in decennial censuses.

For south-south cooperation, the group identified the importance in allowing a comparison of trends, identifying which approaches work and which do not and building commitments across agencies/institutions and countries. The groups also recommended a strengthened role for the United Nations as a facilitator/broker.

Group 4: Building effective partnership for improved responsiveness for addressing gender-biased sex selection partnerships
The group identified several challenges. One is the need to develop a common understanding of 'partnership' and relating this to existing agreements (e.g. the Paris Declaration, Accra Declaration or the MDGs). Several challenges relate to the different stakeholders: civil society (which is a key partner) has very varying degrees of strength in different societies, and there are varying roles of government in leading the response. It is important to further encourage the role of academia to help in the understanding of the issue, and to have all these inputs in designing response. There is also a need to move from paternalistic thinking (including in civil society) toward a more rights-based approach.

It is essential to design partnerships which are truly multi-sectoral, within government (including various ministries) and with the support of United Nations agencies, overcoming individual limitations and building on values for policy formulation and implementations. It is also essential that this be done in a continuous, institutionalized manner rather than on an ad hoc basis.

South-south cooperation is important for facilitation, research, exchange of information and best practices, and north-south cooperation and triangular relationship can also be initiated.

Group 5: Research
The group noted that there is great variation among countries in research capacity, as well as in the local situations. The science is, to some, extent 'immature' on the issue. There is a need for a new research framework and tool kit for statisticians, including guidelines for how to test it, e.g. through census, birth registration data, surveys, checklists and so on. There is still a great need for qualitative work to understand the reason why the problem exists, especially in vulnerable areas, including emerging in areas such as Eastern Europe. Qualitative information is important, and there is a need for complementing/pulling together research that has been undertaken already, e.g. on gender issues and anthropological information. The larger environmental and structural factors leading to SRB imbalance should be pulled in.

For south-south cooperation, it will be important to create a platform to help countries learn from one another, irrespective of stage of research or local situation. Regional research institutions in all affected regions should become hubs and facilitate the exchange, and this must be done on a regular basis, rather than every five years.

Group 6: Future challenges in son preference

The group noted that many of the affected countries are undergoing massive transformations at various levels: institutional, economic, political and socio-cultural. Demographic transitions, both in fertility and urbanization as well as increasing labour shortages, will also influence the factors which determine son preference. For example, the transition to market economies at times can make it more difficult to implement gender equity policies, and commercialization can make it more difficult to regulate technology. There is, therefore, a great need to allow for unraveling of this dynamic situation and to gain a better understanding through research. It is also important to monitor the shifting impact of policies and programmes. All existing and new policies (e.g. education, inheritance, old age support, political participation) must be analyzed to ensure they do not reinforce traditional norms, barriers to their implementation need to be analyzed and addressed and their internal and cross-sectoral consistency should be reviewed. For example, in some countries, laws governing inheritance of land or of housing, ownership upon marriage and divorce are internally inconsistent.

Specifically with respect to south-south cooperation, the recommendation was for international sharing of experiences on trends, research as well as the effectiveness of response, e.g. through international workshops.

Group 7: Plan of action for Viet Nam to address sex ratio at birth imbalance - short-term and long-term

The group identified a wide range of activities: strengthening information, education, communication, advocacy and behavioural change communication; targeting leaders and policy makers; as well as community mobilization, with religious/community leaders. This should be both direct and indirect: 1) identifying models at grassroots level, involving women's groups, facilitating group discussions and discussing both the value of girls and the consequences of SRB imbalance; 2) community level interventions, focusing on housing for the elderly and job creation for girls/women; 3) at policy level, interventions target service providers, rather than pregnant women; better social security policy, care for the elderly, waiving school fees for girls; better law enforcement to prohibit sex selection services, identifying all related policies, review, revise and harmonize if needed; and, 4) strengthening data bases and evidence to be provided to media for advocacy and communication and for policy development.

With respect to south-south cooperation, the group recommended sharing of experience through workshops, exchange visits, short term training and provisioning of technical advice.

Closing plenary: concluding remarks
Chairs: *Ms. Nobuko Horibe, and Dr. Duong Quoc Trong, General Director, General Office for Population and Family Planning, Ministry of Health, Viet Nam*

Ms. Horibe noted that the meeting had been extremely intense and interesting. Firstly, it has been an honour to have such high level support and to listen to the excellent presentations by a wide variety of country experts. It has shown once again the importance of south-south sharing, which gives an opportunity both for better analysis, for generating commitment and for breaking taboos. She noted five years ago, it might not have been possible to have such a meeting.

She summarized a few main issues emerging from the discussions in the workshop:

With respect to **trends,** she noted that the workshop had established that the issue of imbalances in SRB is affecting a growing number of countries, with great variation within countries and over time. The phenomenon complements the much older phenomenon of sex selection after birth.

With respect to **determinants,** she found the framework utilized in the meeting quite useful – identifying the three prerequisites for SRB: son preference, low or decreasing fertility and availability of technology. She also noted that there is general agreement that son preference is the root cause, and this has implications for the response.

With respect to **consequences,** she noted that there is as yet limited evidence of the effects on women, and indeed that most of the presentations dealt with the long term effects for men - both the 'marriage squeeze' beginning 20-30 after birth and the 'retirement squeeze' after 60-70 years. She was struck by the attention given to the consequences for men, and noted that some presentations have cautioned that it should not lead to our perceiving women in an instrumental manner.

She noted that one could see this as a 'perfect storm' of demographic trends – decreasing fertility, sex ratio imbalance and urbanization together expected to impact not least on poor, rural men with no family support.

With respect to **response**, she noted that there is an overwhelming expressed need for better data and research, but also a set of responses in different countries, which is characterized both by similarities and differences, with all addressing both supply (regulation of technology) and demand (reductions of son preference). Although it is difficult to draw a clear line of causality, perhaps there is room for cautious optimism, as some countries, or regions of countries, may be seeing a reversal of trends, although this may vary greatly with the stage of development of the country concerned.

She thanked the group presentations, where she saw not only a great need for data but also a need to further unwrap the concept of son preference, as it develops over time and with a clear distinction between general attitudes, 'son compulsion' based on economic and cultural imperatives, and actual sex selection. Both the influence of fertility and the nature of the technology and its availability are also changing rapidly over time and add to the thought that this is a very dynamic field.

Finally, she noted that SRB is only an indicator, but it is one that might actually help us focus on and address many underlying tendencies and issues in society.

Dr. Trong expressed his deep appreciation for a workshop which has been very successful. He noted his thanks for the very high level participation, as well as the many excellent presentations by experts from many countries, which provided a wonderful opportunity to share experiences and lessons learned. He thanked the Viet Nam UNCT and UNFPA for the initiative and organization, as well as the many people who may have been less visible but who made sure that the workshop ran so smoothly on the management side. He expressed his hope that this workshop will be of great use to all who have participated and declared it officially closed.

Annex I – Workshop agenda

Day 1: 5 October 2011 (Thang Long Ballroom, 7th Floor, Melia Hanoi Hotel)

8:30 - 9:00 am   Registration

Session 1: Opening Session

9:00 - 9:45 am   Introduction (5 min)
Mr. Dinh Huy Duong, Deputy Director, Personnel Department, General Office of Population and Family Planning, Ministry of Health

Objectives of the meeting (5 min)
Ms. Upala Devi, GBV Technical Advisor, UNFPA New York

Opening remarks
Mr. Nguyen Thien Nhan, Deputy Prime Minister of S.R. Viet Nam
Ms. Nobuko Horibe, Director, UNFPA Asia-Pacific Regional Office, Bangkok
Mr. Eamonn Murphy, United Nations Resident Coordinator a.i in Viet Nam

Session 2: Upcoming Regional Trends and Implications

9:45 - 10:45 am   Sex imbalances at birth: Trends, consequences and policy implications (40min)
Mr. Christophe Guilmoto, International Technical Expert, Paris

Questions and Answers (20min)
Chair: Dr. Bruce Campbell, Country Representative, UNFPA in Viet Nam

10:45 - 11:00 am   Tea Break

Session 3: Country Experiences from Eastern Asia

11:00 - 12:00 pm   Country Experiences – VIET NAM (40min)
Overview report on Sex Ratio at Birth in Viet Nam
Mr. Nguyen Van Tan, Deputy General Director, General Office For Population and Family Planning, Ministry of Health, Viet Nam

Questions and Answers (20min)
Chair: Mr. Luo Mai, Director, National Population and Family Planning Commission of China

12:00 - 1:00 pm   Lunch (El-Oriental Restaurant, 1st Floor, Melia Hanoi Hotel)

1:00 - 2:00 pm   Country Experiences – CHINA (40min)
Gender Imbalance and Policy Responses: China's Experience
Mr. Li Shuzhuo, Director, Institute for Population and Development Studies
Ms. Zheng Zhenzhen, Professor, Chinese Academy of Social Sciences
Ms. Yang Juhua, Professor, Renmin University of China
Mr. Luo Mai, Director, National Population and Family Planning

Commission of China

Questions and Answers (20min)
Chair: Ms. Anuradha Gupta, Joint Secretary, Ministry of Health and Family Welfare, India

Session 4: Country Experiences from South Asia

2:00 - 3:00 pm   Country Experiences – INDIA (40min)
Pre-natal Sex Selection in India: Mapping Government Action
Ms. Anuradha Gupta, Joint Secretary, Ministry of Health and Family Welfare, India

Pre-natal Sex Selection in India: Understanding patterns, consequences and the community response
Mr. Purushottam M.Kulkarni, Demographer, School of Social Sciences
Mr. Ravinder Kaur, Sociologist, Indian Institute of Technology Delhi
Mr. Subhash Mendapurkar, Director, SUTRA

Questions and Answer (20min)
Chair: Dr. Duong Quoc Trong, General Director, General Office For Population and Family Planning, Ministry of Health, Viet Nam

3:00 - 3:15 pm   Tea Break

3:15 - 4:15 pm   Country Experiences – PAKISTAN (15min)
Pakistan: Trends in sex selection
Mr. Rabbi Royan, Country Representative, UNFPA in Pakistan
Ms. Batool Zaidi, Senior Program Officer, Population Council, Pakistan

Country Experiences – BANGLADESH (15min)
Mr. Arthur Erken, Country Representative, UNFPA in Bangladesh
Mr. Dipankar Roy, Deputy Director, Bangladesh Bureau of Statistics

Country Experiences – NEPAL (15min)
Mr. Damar Ghimire, Programme Manager, UNFPA in Nepal

Questions and Answers (15min)
Chair: Ms. Mandeep Janeja, Deputy Representative, UNFPA in Viet Nam and Ms. Tran Thi Van, Assistant Representative, UNFPA in Viet Nam

Session 5: Experiences from Countries with Emerging SRB Imbalance: The Caucasus and the Balkans

4:15 - 5:15 pm   Country Experiences – ARMENIA (10min)
Mr. Vahe Gyulkhasyan, Reproductive Health Coordinator, UNFPA in Armenia

Country Experiences – AZERBAIJAN (10min)
Sex Ratio Imbalance in Azerbaijan: Situation Analysis
Mr. Teymur Seyidov, HIV & Youth Programme Analyst, UNFPA in Azerbaijan

Country Experiences – GEORGIA (10min)
Ms. Lela Bakradze, Programme Analyst, UNFPA in Georgia

Country Experiences – ALBANIA (10min)
Ms. Manuela Bello, Assistant Representative, UNFPA Albania

Questions and Answers (20min)
Chair: Mr. Rabbi Royan, Country Representative, UNFPA in Pakistan

5:15 - 5:30 pm   Closing Plenary: Wrap-up of first day and brief outline of next day
Dr. Bruce Campbell and Ms. Upala Devi

6:00 pm   Welcome Dinner (Ballroom 3, 1st Floor, Melia Hanoi Hotel)

Day 2: 6 October 2011 (Thang Long Ballroom, 7th Floor, Melia Hanoi Hotel)

Session 6: United Nations commitment to addressing sex ratio imbalance

9:00 - 10:15 am   Presentation of the Inter-Agency Statement 'Preventing gender biased sex selection' (10min)
Dr. Bela Ganatra, Lead Specialist, Dept. of Reproductive Health and Research, WHO Geneva

Panel with UNFPA, WHO, UNICEF, and UN Women (35min)
Ms. Upala Devi, GBV Technical Advisor, UNFPA New York
Dr. Bela Ganatra, Lead Specialist, Dept. of Reproductive Health and Research, WHO Geneva
Ms. Katharina Hulshof, Representative, UNICEF in India
Ms. Sushma Kapoor, Deputy Regional Program Director, UN Women South Asia

Joint UN India Team response to gender-biased sex selection (10min)
UN Team in India

Questions and Answers (20min)
Chair: Ms. Nobuko Horibe, Director, UNFPA Asia-Pacific Regional Office

10:15 - 10:30am   Tea Break
Media Session (Function Room 4, 2nd Floor, Melia Hanoi Hotel)

Session 7: Seeking Solutions to skewed sex-ratios

10:30 - 11:30 am   The Case of Republic of Korea: lessons learned from their success (30min)
Sex Ratio at Birth Transition and the Diffusion Story: Evidence from Republic of Korea
Ms. Heeran Chun, Assistant Professor, Jungwon University, Republic of South Korea

Sex Selection in Asia: what policies might reduce it? (15min)
Ms. Monica Das Gupta, Senior Demographer, Development Research Group, The World Bank, Washington D.C

Questions and Answers (15min)

Chair: Mr. Arthur Erken, UNFPA Bangladesh Country Representative

Session 8: Role of civil society to address the issue

11:30 - 12:15 pm   Masculinity, Gender Equality and Son Preference in Nepal
                        Mr. Ravi Verma, Regional Director, International Center for Research
                        on Women (15min)

                        The Root Causes of Son Preference: Findings from empirical research
                        studies on the rise of SRB in Viet Nam
                        Dr. Khuat Thu Hong, Director, Institute for Social Development
                        Studies, Viet Nam (15min)

                        Questions and Answers (15min)
                        Chair: Ms. Ena Singh, Assistant Representative, UNFPA in India

12:15 – 1:15 pm   Lunch (El-Oriental Restaurant, 1st Floor, Melia Hanoi Hotel)

Session 9: Laying the ground for developing a South-South cooperation framework

1:15 pm - 3:00 pm   Group work
                        Facilitators: Ms. Upala Devi and Ms. Kiran Bhatia, Gender Advisor,
                        UNFPA Asia-Pacific Regional Office

3:00 - 3:15 pm   Tea Break

3:15 pm - 4:15 pm   Group Reports
                        Chair: Dr. Bruce Campbell and Mr. Christophe Guilmoto, Technical
                        Expert

4:15 pm - 4:45 pm   Closing plenary: Concluding remarks
                        Chair: Ms. Nobuko Horibe, Director, UNFPA Asia-Pacific Regional
                        Office and
                        Dr. Duong Quoc Trong, General Director, General Office For
                        Population and Family Planning, Ministry of Health, Viet Nam

Annex II – List of participants

Representatives of Government

Bangladesh

Dipankar Roy
Bangladesh Bureau of
Statistics

China

Luo Mai
National Population and
Family Planning Commission
of China

India

Anuradha Gupta
Ministry of Health and Family
Welfare

Rajiv Kale
Ministry of Women and Child
Development

Ireland

Margaret Gaynor
Irish Embassy, Hanoi

Garvan McCann
Irish Embassy, Hanoi

Norway

Zenia Chyrsostomidis
Norwegian Embassy, Hanoi

Spain

Alberto Virella
Spanish Embassy, Hanoi

Viet Nam

Dang Thi Bich Thuan
General Office of Population
and Family Planning

Dao Xuan Quang
Ministry of Plan Investment

Do Ngoc Tan
Population Department,
General Office of Population
and Family Planning

Do Thi Hong
General Office of Population
and Family Planning

Duong Quoc Trong
General Office of Population
and Family Planning

Giap Van Toan
Department of Population of
Bac Giang Province

Ha Thi Hong Thuy
Bac Ninh Department of
Health

Ho Xuan
Department of Population of
Bac Ninh Province

Hoang Thi Khuyen
Department of Population of
Hung Yen City

Le Van Luong
Department of Population of
Vinh Phuc City

Luong The Khanh
Ministry of Health

Nguyen Duc Vinh
Ministry of Health

Nguyen Duy Khe
Ministry of Healht

Nguyen Minh Loi
Ministry of Health

Nguyen Thi Hien
General Office of Population
and Family

Nguyen Thi Hoang Lan
Government Office

Nguyen Thi Thu Nam
Ministry of Health

Nguyen Thi Van
Ministry of Police

Nguyen Viet Tien
Ministry of Health

Nguyen Xuan Truong
Ministry of Health

Pham Nang An
Ministry of Health

Ta Thanh Hang
General Office of Population
and Family Planning

Tran Duc Quang
General Office of Population
and Family Planning

Tran Quang Hung
Ministry of Family Affairs

Tran Thi Thanh Mai
General Office of Population
and Family Planning

Tran Trung Kien
Nam Dinh Department of
Population

Van Tat Pham
Department of Population of
Ha Nam City

Academia and Civil Society Organizations

China

Yang Juhua
Renmin University

Zheng Zhenzhen
Academy of Social Sciences

Denmark

Siri Tellier
Copenhagen University

India

Purushottam M. Kulkarni
School of Social Sciences,
Jawaharlal Nehru University

Ravinder Kaur
Indian Institute of
Technology Delhi

Subhash Mendhapurkar
SUTRA

Pakistan

Rukh-E-Batool Zaidi
Population Council

Republic of Korea

Heeran Chun
Jungwon University

Viet Nam

Khuat Thu Hong
Institute for Social
Development Studies

Nguyen Mai Huong
Viet Nam Fatherland Front

Nguyen Thanh Hao
Viet Nam Youth Union

Nguyen Thanh Liem
Health and Population
Institute

Nguyen Thi Hoai Duc
Reproductive Health Institute

Tran Ngoc Thanh
Viet Nam Farmer's Union

Tran Sy Luan
Labor and Social Science
Institute

Media – Viet Nam

Bui Ngoc
VTCV14

Cao Thuy Giang
Viet Nam Plus

Dang Thao Lan

Dang Thuy Ha
VTC8

Dieu Thuy
Nhan Dan Online

Duong Ngoc
Viet Nam Picture

Ha Ngoc Lan
Atlantic Philanthropies

Ha Nguyet Thu
O2TV

Hanh Trang
Culture Newspaper

Kim Dung
Viet Nam Women

Kim Thanh
Communist Party of Viet
Nam Online Newspaper

La Thuy Duong
Viet Nam Law Newspaper

Lan Huong
Dat Viet Newspaper

Le Tam

Le Thu Huong
Viet Nam News

Luong Ngoc Thao

Mai Huong
Voice of Viet Nam

Ngo Thanh Hang

Nguyen Dieu Linh

Nguyen Thi Thuy

Nguyen Thu Hang
Viet Nam News

Nguyet Ha
Cong Thong Tin Dien Tu
Chinh Phu

Nong Thu Huyen

Nguyen Tuan Viet
Viet Nam Financial Times

Pham Huong Giang

Pham Thi Lan

Thai Ha
Tien Phong Newspaper

Thanh Hang
Lao Dong online newspaper

Thong Tan Xa Viet Nam

Thuy Nga
VOV1

Trinh Huong Giang
Viet Nam Law Newspaper

Tu Luong

Vinh Quven
Voice of Viet Nam

Development Partners and United Nations Organizations and Agencies

China

Shuzhuo Li
Institute for Population and
Development Studies

India

Katharina Hulshof
UNICEF

Sushma Kapoor
UN Women

France

Christophe Guilmoto
CEPED

Valentine Becquet
CEPEC

Viet Nam

Caroline Den Dulk
UNICEF

Ha Thanh Binh
Save the Children UK

Jean Munro
UNDP

Le Ngoc Bao
Pathfinder

Permille Goodall
UNDP

Rachel Macreadie
IOM

Setsuko Yamazaki
UNDP

Tran Bich Thuy
Concept Foundation

Trinh Anh Tuan
UNICEF

International

Bela Ganatra
WHO Geneva

Monica Das Gupta
World Bank in Washington
DC

Ravi Kumar Verma
International Center on
Research on Women

United Nations Population Fund - Country Offices

Albania

Manuela Bello

Armenia

Vahe Gyulkhasyan

Azerbaijan

Teymur Seyidov

Bangladesh

Arthur Ronald M. Erken

China

Elina Nikulainen

Gao Cuiling

Zeljka Mudrovcic

Georgia

Lela Bakradze

India

Dhanashri Brahme

Ena Singh

Nepal

Damar Ghimire

Pakistan

Rabbi Royan

Viet Nam

Bruce Campbell

Clara Gomez

Dao Khanh Tung

Doan Mai Huong

Donal Fitzpatrick

Duong Van Dat

Ha Huu Toan

Ha Thu Nga

Le Thi Phuong Mai

Mandeep Janeja

Nguyen Boi Ngoc

Nguyen Ngoc Quynh

Nguyen Quynh Trang

Nguyen Xuan Hong

Pham Nguyen Bang

Phan Thu Hien

Tran Chien Thang

Tran Thi Thu Huong

Tran Thi Van

Regional Offices – Asia Pacific

Christophe Lefranc

Kiran Bhatia

Nobuko Horibe

Petra Righetti

Headquarters – New York

Abubakar Dungus

Upala Devi

Annex III – Bios of Chairs and Presenters

ANURADHA GUPTA is Joint Secretary, Ministry of Health and Family Welfare of the Government of India. Mrs. Gupta is a member of the Indian Administrative Service, which she joined in the year 1981. Currently working as the national programme manager for Reproductive and Child Health in the Ministry of Health & Family Welfare, her portfolio includes maternal health, child health, immunization, family planning and implementation of legislation to prevent misuse of medical technology for pre-birth sex selection. Mrs. Gupta has earlier worked as Principal Secretary (Health) in the Indian State of Haryana and, therefore, brings with her a very strong understanding of field implementation and challenges.

ARTHUR ERKEN is a medical anthropologist by training. He joined UNFPA in New York in August 1993. He first served as Research Advisor in the secretariat of the ICPD, which was held in Cairo, Egypt, in September 1994. Following the ICPD, he became a staff member of the ICPD Task Force in UNFPA, charged with institutionalizing the outcomes of the ICPD. In 1996, he joined the Division for Arab States and Europe as a Programme Officer covering Eastern Europe. In September 1998, he was appointed Deputy Representative of UNFPA in the United Republic of Tanzania. In January 2001, he came back to UNFPA headquarters as Special Assistant to the Deputy Executive Director (Programme). In April 2004, he was appointed as Associate Director for Policy and Global Quality Standards in the Development Group Office (now renamed DOCO), located in UNDP Headquarters in New York. In this position, he was intensively involved in United Nations reform and inter-agency collaboration, most notably CCA/UNDAF processes and further harmonization and simplification of programme implementation modalities. In July 2007, he was appointed as UNFPA Representative in the People's Republic of Bangladesh. He served as acting United Nations Resident Coordinator for almost one year (April 2010-March 2011), at a time when the United Nations was formulating its UNDAF for 2012-2016.

BATOOL ZAIDI is Senior Programme Officer at the Population Council in Pakistan. Ms. Zaidi has a Bachelor's in Economics from Mount Holyoke College, United States and a Master's in Population and Development from the London School of Economics, United Kingdom. In her time at the Council, she has extensively analyzed the two rounds of Pakistan's Demographic and Health Survey, as well as other reproductive health surveys conducted over the last 16 years. As a Senior Program Officer for the Poverty, Gender and Youth unit at Population Council, she has authored various pieces on Pakistan's fertility. She has also presented papers at the International Union for the Scientific Study of Population's XXVI International Population Conference held in Morocco, the International Union for the Scientific Study of Population's Seminar on the Macroeconomics and Demographic Change held in Paris, Population Association of America in D.C. and other national and international forums.

BELA GANATRA (Dr.) is lead specialist at the Department of Reproductive Health and Research, WHO Geneva.

BRUCE CAMPBELL (Dr.) is Representative of UNFPA in Viet Nam and member of the Viet Nam UNCT. Mr. Campbell holds a Master's in Public Health in Health Policy/Planning and Population Sciences from Harvard University, United States as well as a Ph.D. in Medicine and Health Systems from the University of Amsterdam in the Netherlands. During his career within the United Nations System, he has held senior positions as UNFPA representative in Zimbabwe and Eritrea. He has a long experience in the fields of Public Health / Reproductive Health Care and has participated in technical assistance missions to countries such as Kenya, Zimbabwe, Ghana, South Africa, Pakistan, Bangladesh, Nepal, Mongolia and Egypt.

CHRISTOPHE Z GUILMOTO is a demographer at the Institut de Recherche pour le Développement –Center for Population and Development, Paris, France. Trained in Mathematics as well as in Sociology, he was affiliated to the Delhi School of Economics and the Institute of Economic growth in India as well as worked for the Ecole française d'Extrème-Orient. He was the Director of the Committee for International Cooperation in National Research for Demography from January 2005 till September 2007. Since then, he has mostly worked on sex ratio issues in Asia, with colleagues across Asia and also in coordination with UNFPA (Katmandu, Delhi and Hanoi offices). Mr. Guilmoto has taught at the École des hautes études en sciences sociales between 2001-2003 as well as a course on Population in Developing Countries at the Paris Institute of Demography since 2005. He also runs a yearly traineeship programme on geographic information systems, geostatistics and demography as part of the RFFD.

DAMAR PRASAD GHIMIRE is a national from Nepal and holds a Master's in Business Administration from Tribhuvan University - Nepal (1997); and is currently completing his Master's in International Health from the Swiss Tropical Institute of Public Health, Basel, Switzerland. Since October 2010, he has been working as the Regional Development Coordinator for UNFPA Nepal, based in the Regional Support Office at Jaleshwor Mahottari which covers 7 districts of the Eastern and the Central Development regions of Nepal. Before joining UNFPA, he worked as the Director and member-secretary for the Government of Nepal/ HIV, AIDS and STI Control Board (a semi-autonomous entity for national response to HIV) for two years. He has more than a decade's experience working with different bi-lateral organizations and international organizations like DFID, GTZ, SNV, OXFAM and Red Cross Society in Nepal as a senior professional.

DIPANKAR ROY has been working in the Bangladesh Bureau of Statistics, National Statistical Office, since 1999. Mr. Roy holds a Master's degree in Statistics and a Ph.D. in Economics from Japan. Currently, he works at the Census Wing as Deputy Director and as Project Director in the "Monitoring the Situation of Children and Women" project. He conducted population and housing censuses in 2001 and 2011 as District Census Coordinator and in writing the 2001 census report. He was also involved in the process of developing the Sample Census 2011 as well as in the monitoring process of the Millennium Development Goals. Mr. Roy is a Life Member of the Bangladesh Statistical Association, the Bangladesh Economic Association, the Japan International Cooperation Agency Alumni Association in Bangladesh, the Japanese Universities Alumni Association in Bangladesh and the 18th Bangladesh Civil Service Forum.

DUONG QUOC TRONG (Dr.) is General Director of General Office for Population and Family Planning in Viet Nam. He completed his Ph.D. from the Maternity Department,

Faculty of Medicine at Masaryk, Brno, Czechoslovakia. He has worked extensively on issues of population, public health and gender. Before joining the General Office, he worked as treating doctor-cum-lecturer at the Department of Obstetrics of the 103 Military Medical Institute and Military Medical Institute; he was then Deputy Head of Department of Obstetrics at the 108 Central Military Hospital. Following this stint, he worked as Director of the Administrative Bureau of the Ministry of Health and as Director of the Bureau of HIV/AIDS Control, Ministry of Health.

ENA MANJIT SINGH is Assistant Representative in the UNFPA India Country Office and is based in New Delhi. She has been with UNFPA since 1985. At the Fund, Ms. Singh has handled a variety of portfolios including population policy, reproductive health service strengthening, adolescent reproductive health, and mainstreaming gender in reproductive health and population programmes. In recent years, she has been engaged with addressing the issue of masculinization of India's child sex ratio and prevention of sex selection. Ms. Singh holds a Master's of Science in Public Health from the University of North Carolina, United States and a Bachelor's in Economics from the University of Delhi, India. She is a fellow of the Gates-Packard funded Population Leadership Programme at the University of Washington in Seattle, United States. At this time, she was affiliated with the School of Public Affairs and the School of Public Health and Community Medicine.

HEERAN CHUN is Assistant Professor in the Faculty of Health Science, Jungwon University, Republic of South Korea. Trained in social epidemiology at the Graduate School of Public Health, Seoul National University, she has worked on issues on gender and health, social determinants of health, and the effect of gender discrimination on women's health.

JUHUA YANG is Professor of Demography at the Center for Population and Development Studies, Rennin University of China. She is interested in social wellbeing and its articulation for facilitating social change, with a particular focus on gender inequality, population aging, migration, and policy issues. She has a variety of publications to her name, including Population Change and Poverty among the Elderly (2011); Fertility Policy and Sex Ratio at Birth in China (2009); Social Statistics and Data Management: Application of Stata (2008); and Beyond Birth Control: Fertility Policy and Children's Wellbeing in Transitional China (VDM Verlag Dr. Muller, 2008).

KARIN HULSHOF is UNICEF representative in India where she is responsible for the overall coordination, development, formulation and management of the UNICEF Country Programme of Co-operation. She leads policy dialogue and advocacy initiatives with the government and other partners for the enhancement of the survival, protection, development and participation of children and women in national development efforts and the achievement of the Millennium Development Goals. Ms. Hulshof is a national of the Netherlands. She graduated from the University of Groningen in the Netherlands with a Master's degree in Social Science and specializations in Economics, Spanish, Cultural Anthropology and Education in June 1985. She became Honorary Fellow of the Senate of the University of Bucharest, Romania in 2002.

KHUAT THU HONG (Dr.) is Co-Director of the Institute for Social Development Studies, an independent and not-for-profit research institution in Hanoi, Viet Nam. Dr. Hong's major fields of studies include gender, sexuality and the family. Since early 1990s, Dr. Hong has been actively involved in research and advocacy on fertility, family planning and reproductive

health and starting 2007, she leads the Institute for Social Development Studies' research team to undertake various researches on the issue of son preference and sex ratio at birth in Viet Nam.

KIRAN BHATIA is Gender Advisor UNFPA Asia Pacific Regional Office. Ms. Bhatia has a background in professional social work and gender and is a development professional with international expertise in gender mainstreaming, women's and children's rights and protection, advocacy and psyco-social support. She has thirty years' experience in facilitation for capacity building of government and civil society, programme development, participatory research and technical support for establishing new programmes. Ms. Bhatia has served as the Regional Advisor for Child Protection and Gender for South Asia with the UNICEF Regional office for South Asia as well as with the World Bank, Nepal. Ms. Bhatia has been with UNFPA since 2004 and joined as the Advisor for Gender and Socio-cultural Research at UNFPA, Country Technical Services Team for South and West Asia in Kathmandu, Nepal. She is currently the Gender Adviser at the Asia pacific regional Office of UNFPA.

LELA BAKRADZE is Programme Analyst at UNFPA Country Office in Georgia. She is a Doctor of Medicine in General Medicine from Tbilisi State Medical University, Georgia and holds a Master's in Business Administration from the Caucasus School of Business, Tbilisi, Georgia. For 14 years, she worked as a medical doctor in leading medical clinics in St. Petersburg, Russia and Tbilisi, Georgia. In 1998, Ms. Bakradze shifted careers and started working in the developmental field. In 2001, she joined UNIFEM in Georgia and in 2005, joined the UNFPA Country Office in Georgia as the National Programme Officer. Currently, Ms. Bakradze covers reproductive health, population and development and gender components of the Country Programme and supports regional partnership for Reproductive Tract cancer prevention. She is married and has a 23 year old son.

LUO MAI (Dr.) is a medical doctor and holds a Master's Degree from the Institute of Society and Population Research, People's University of China. He worked in a local hospital for 6 years and subsequently become a staff member in the National Population and Family Planning Commission, where he is currently focusing on issues of gender promotion in the Commission. He has worked on multiple projects that deal with sex ratio at birth imbalance in China.

MANDEEP JANEJA is Deputy Representative in UNFPA Viet Nam. Ms. Janeja has six years of field experience in the UNFPA India Country Office, including in the areas of policy development, government-NGO partnerships and development of CCA-UNDAFs. Most recently, she worked in UNFPA Headquarters as part of the Programme Division in developing the current UNFPA Strategic Plan, global and regional programme, global policy frameworks on evaluation and youth, and in piloting an innovative approach for improving policy-programme implementation in selected countries of Africa, Central America and South Asia. During her five year stint in UNFPA HQ, Ms. Janeja was seconded to the United Nations Development Group for a year where she continued to work on a number of inter-agency working groups, and supported the development of guidelines for simplifying the UNDAF, as well as proposals for strengthening UNCT capacity. Ms. Janeja holds a Master of Arts in International Affairs from the Fletcher School of Law and Diplomacy, United States; a Master of Arts in Sociology from the Delhi School of Economics, Delhi, India; and a

certification in sexual and reproductive health from the London School of Tropical Medicine and Hygiene, London, United Kingdom.

MANUELA BELLO is Assistant Representative at UNFPA Albania. She graduated from the Medical Faculty of Tirana, Albania as general practitioner in 1989 and holds a post graduate diploma on Intensive Care and Anesthesia. She also holds a Master Degree in Gender and Development from the University of Tirana in Albania. Between 1992-1994, she worked as an intensive care doctor at the pulmonary disease hospital. She then started work for UNFPA as Deputy Director of the Maternal and Child Health programme –a joint Ministry of Health/UNFPA initiative. She joined UNFPA Albania office in 1997 as National Programme Officer and later become assistant representative in 2003, a post she holds until today. She speaks English, Italian and French.

MONICA DAS GUPTA is Senior Demographer in the Development Research Group of the World Bank. Trained in demography and social anthropology at the London School of Economics and the Institute of Development Studies, Sussex, United Kingdom, she has worked extensively on issues of population, public health, and gender. She was elected to the Governing Councils of the International Union for the Scientific Study of Population and the Population Association of America. Before joining the World Bank, she worked at the National Council of Applied Economic Research, New Delhi, and at the Harvard University Center for Population and Development Studies, Cambridge, United States.

NGUYEN VAN TAN is Deputy General Director of the General Office for Population and Family Planning, Ministry of Health in Viet Nam. He is trained in psychology from the Hanoi Teacher University. He has previously worked as Director of the Administration Bureau, Viet Nam Commission for Population, Family and Children. Before joining the National Committee on Population and Family Planning, he also worked as a lecturer at the Hanoi Teacher's University.

NOBUKO HORIBE is a national of Japan and was appointed as the Director of UNFPA Asia and the Pacific Regional Office in September 2008. She provides overall leadership and guidance to the UNFPA Asia and the Pacific Regional Office and supervises two sub-regional offices (Nepal and Fiji) and 22 Country Offices/19 Representatives in the region. She is responsible for operationalizing organizational strategies, ensuring accountability, bringing regional perspectives to the organizational policy and decision-making and promoting population, reproductive health and gender issues in the region. Nobuko has 26 years of working experience in the UN system. Her United Nations career began with UNDP in Barbados in 1984 as Programme Officer. She then moved to UNFPA in 1987 and worked in China (as Deputy Representative) and Lao PDR (as Representative) as well as at headquarters of UNFPA, UNOPS and UNODC in New York and Vienna. Prior to taking up the position as the Regional Director, she was the Deputy Director, Division for Oversight Services, UNFPA HQ in New York. Nobuko holds Bachelor's in Economics and Sociology from the Hitotsubashi University, Tokyo, and a Master's in International Studies from the University Of Denver's Graduate School of International Studies, United States.

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Annex IV – Some key concepts

Sex Ratio is usually expressed as the number of males per 100 females in any given population (in India, it is often expressed in terms of number of females per 1000 males).

Sex Ratio at Birth (SRB) is the number of boys born per 100 girls. In most populations, this ratio is in the range of 104-106, although some populations experience ratios as low as 103 or as high as 107, even in the absence of deliberate sex selection. Thus, it is biologically "normal" that more boys are born than girls.

Sex Ratio at Birth, by Birth Order is the sex ratio of different birth orders, for instance, first, second or third births. Some studies show minor variations in sex ratio according to birth order, even in the absence of sex selection, but the magnitude is small.

Child Sex Ratio refers to the number of male children under a certain age to the number of female children under that age. It is less precise than SRB, and is used primarily in areas where birth or age registration is less reliable (in India, for instance).

Sex Ratio of Mortality is the number of males who die, compared to the number of females who die, for a given age group. In most populations, mortality is higher for males than for females at all ages (for example, infant mortality is often 10-30% higher for boys). There are both biological and behavioral reasons for this pattern.

Sex Ratio in the Total Population (SRTP) refers to the number of males per 100 females in the total population. In most populations, the numerical advantage of males at birth gradually erodes over the life span due to the above-mentioned higher male mortality. As a result, in most populations, there are more females than males (sex ratio in the total population less than 100). Thus, on average, the continents of Latin America and Caribbean, North America, Africa, Oceania and Europe experience rates in the range 93-98. The older the population, the more likely it is that there will be a surplus of females.

Skewed Sex Ratio (sometimes referred to as "imbalanced sex ratio") in this report refers to any aberration from the above "normal" situation. Such skewed sex ratio can be the result of many factors and which are not necessarily the result of sex selection before or after birth.

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