



**DIRECTORATE-GENERAL FOR EXTERNAL POLICIES**  
**POLICY DEPARTMENT**



# **GENDERCIDE: THE MISSING WOMEN?**

**DEVE**



**DIRECTORATE-GENERAL FOR EXTERNAL POLICIES OF THE UNION**

**DIRECTORATE B**

**POLICY DEPARTMENT**

**STUDY**

## **GENDERCIDE: THE MISSING WOMEN?**

### **Abstract**

Some countries have for many years witnessed distorted sex ratios in the sense that the share of male population is larger than one would expect based on “natural” gender ratios at birth and mortality rates. This imbalance is often the result of son preference, rooted in cultural and economic experiences, and accentuated by declining fertility and pressures to have smaller families. With a focus on China and India, where skewed sex ratios have been highlighted by the international community and recognised by their governments, this study reviews the key literature exploring the causes, current trends and consequences of sex selective practices from infanticide and neglect to more modern sex determining and selective practices such as ultrasound tests and consequent sex selective abortions. Despite legislation regulating sex selection in both China and India, these practices are difficult to monitor, with medical practitioners and equipment suppliers reaping profits from the procedures. Skewed ratios have also been observed in other countries, such as Vietnam, Albania, Azerbaijan and Georgia.

Normalisation of sex ratios cannot be achieved by simply controlling the use of sex selective technologies. A sustainable way to reduce sex selection requires strategies which focus on countering the gender inequality that drives son preference. An issue already addressed by the European Assembly, the European Parliament has a role to play in highlighting the issue through its relevant committees, such as Committee of Development, Human Rights, International Trade and Women’s Rights and Gender Equality, as well as through their country-specific delegations, as well as in the upcoming Multi-Annual Financial Framework 2014-2020.

This study was requested by the European Parliament's Committee on Development.

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**LINGUISTIC VERSIONS**

Original: EN

**ABOUT THE EDITOR**

Editorial closing date: 16 March 2012.

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*Printed in Belgium*

ISBN: 978-92-823-3695-3

Doi: 10.2861/66673

The Information Note is available on the Internet at

<http://www.europarl.europa.eu/activities/committees/studies.do?language=EN>

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## EXECUTIVE SUMMARY

Persistent discrimination against female population has led to a growing sex imbalance favouring males to females in some parts of the world, as households have turned to sex selective practices from infanticide, practiced for many decades, to modern techniques such as ultrasound tests followed by sex selective abortions, to secure male offspring. Imbalanced sex ratios at birth are a particular cause of concern in some South Asian, East Asian and Central Asian countries, with some more recent evidence emerging from some European countries.

Sex ratio is defined as the ratio of males to females in a population, and is expressed as the number of males per either 100 (or in the case of India, 1000, females), and the biologically normal sex ratio at birth ranges from 102 to 106 males per 100 females. In the spring of 2011, China and India announced their census findings for 2010/11. Both nations showed a continuing imbalance in the sex ratio at birth. In China, 118 boys were being born for every 100 girls, up from 116 in 2000. In India, 109 boys were being born for every 100 girls, up from 108 in 2000. This is despite steady economic growth in both nations over the past decade and despite both countries' governments legislating against e.g. sex selective abortion. (Simpson and Smith)

It has been argued that, similarly to Amartya Sen's estimates in 1990, still today as many as 100 million women could be "missing", and the possibility of male/son preference and consequent sex selection at birth, and the mistreatment of young girls remains a major concern, particularly in parts of Asia (Anderson & Ray 2010).

Commissioned by the European Parliament, and with a focus on China and India, this paper reviews key literature on inflated sex ratios, and spells out some of the main concerns and challenges relating to policies and actions seeking to address sex selective practices and the resulting gender imbalance in these countries and beyond.

### Missing women in China and India

A significant amount of knowledge and data on sex discrimination in both India and China has been accumulated over the last twenty years. Moreover, detailed statistics from various sources outline the different aspects of sex discrimination – abnormalities in sex ratios at birth (SRB), abnormalities in child sex ratio (CSR), excess female mortality – at various scales of analyses (national, regional) and for different sub-populations (classified by age, religion, wealth, education, etc.). Postnatal sex selection has been common in both China and India. Before research into pre-natal sex selection, the literature on China has been focusing on infanticide, while on India it has looked into differences in the quality of healthcare for boys and girls in the first years of a child's life.

A combination of three factors has led to increasing numbers of unborn girls in the late 20<sup>th</sup> century in China and India:

- 1) Falling fertility, as female education and the returns to it in the labour force increased. In China the one-child policy (OCP) reduced the family sizes dramatically since its implementation in 1979, adding to household pressures to produce a son
- 2) ultrasound became widely available, starting from urban areas and moving to smaller towns and rural areas, and
- 3) the traditional preference for sons remained deeply entrenched

In China, the sex ratio at birth increased from 107 in 1982 to 120 in 2005 (Li). In India, estimates based on Census of India data indicated little change during the same period (from just over 107 in 1981 to 106.7 in 2001) while those based on sample registration surveys indicated an increase from 109 in 1982-1984 to a worrying 133.6 in 2003-2005 (Kulkarni). India's most recent census from 2011 revealed a growing imbalance between the number of girls and boys aged 0-6 years.

Both countries show visible increases in sex ratios at birth amongst second – or higher order births when the first-born is a girl. In India the well-educated and affluent urban households are more likely to resort to sex selective practices and, contrary to previous studies, skewed sex ratios have recently been observed beyond Western parts of the country. Despite the widespread disbelief in effectiveness of current regulations, such as the Pre-Conception and Pre-Natal Diagnostic Techniques (PNDT) Act, recent studies suggest that this Act has in fact had a positive impact on the sex ratio, in that the law has been successful in hindering any further worsening of the sex imbalance.

In China the sex ratios increased in the years following the one-child policy (effective from 1979), which still affects around 50-60% of the population, and the female deficit is currently seen largely in the pre-natal group (37-45%). The ratio is more skewed in rural areas but there are increases in big cities such as Beijing and Shanghai.

### **Missing women beyond China and India**

Higher sex ratios at birth can be observed in other countries in Asia, such as Vietnam, as well as in countries around Europe, particularly in Albania, Azerbaijan, Georgia and Armenia. Sex ratio imbalances have also been seen among children of Asian origin parents in the United States, Canada and the United Kingdom, even though these trends don't have an impact of the overall statistics of these countries.

As observed by Anderson and Ray (2010), sub-Saharan African countries have statistically higher proportions of missing women, in comparison to China and India. However in those countries the number of females is lower because of disease such as HIV/AIDS and malaria, while sex ratios at birth are within the natural scale of 100-106 boys to 100 girls. Despite some concerns over differences in healthcare provision to boys and girls, it is therefore difficult to demonstrate a direct link between sex selective methods and missing women in these countries.

### **Consequences of gender bias**

The over-representation of men over women, resulting from an excess number of male births, has a number of potential negative societal consequences. Such imbalance is likely to cause difficulties for the "excess men" to find partners, which may in turn lead to increased mental health issues and anti-social behaviour. Some studies have suggested that the disproportionate increase in male population can lead to significant increase in crime and human rights violations, such as forced prostitution, trafficking for the purposes of marriage or sexual exploitation, followed by spreading of sexually transmitted diseases. High female suicide rates, particularly in China, have also been partially attributed to the sex imbalance, pressure on women for having male offspring and preferential treatment of males in the society.

## **Conclusions and Recommendations**

Unfortunately, female deficit in some societies remains to be eradicated, largely because of a continuing lack of reliable data and monitoring of births and deaths, the profitability of sex selection practices for medical staff and supplier of equipment, and the deeply rooted views on the supremacy of male sex. However some recent studies are more optimistic, suggesting that sex ratios particularly in China and India have already reached their peak and are starting to decrease in response to international attention, improved opportunities for women and, to a certain extent, legislation

However much remains to be done to challenge son preference and sex selection. The present trends of high sex ratios particularly amongst second or higher order births, the fact that improved education levels amongst women e.g. in India seems to have only increased the likelihood of these households to welcome sex selective practices, the financial gains available to medical professionals providing those practices, and previously unidentified countries with alarming sex ratios emerging are challenging trends. There are two main policy approaches: to outlaw sex selection, and to address and challenge the fundamental causes of son preference.

The concerns over sex imbalance have already been highlighted within the Parliamentary Assembly (PACE). The European Parliament is recommended to introduce and highlight the concept of missing women through its sub-committees, particularly on development (DEVE), women's rights (FEMM), human rights (DROI) and international trade (INTA) and through their relevant country-specific delegations. The issue should be incorporated in the Multi-Annual Financial Framework and the relevant Financial Instruments for 2014-2020.

The EP are also encouraged to step up their cooperation with other international bodies who have already demonstrated their concern over the issue, such as World Health Organization (WHO) and United Nations Population Fund (UNPF).

## 1. INTRODUCTION

Missing women, sex selective practices, gender imbalance, and gendercide are all terms used in the context of continuing persistent gender discrimination and bias against girls and women in some parts of the world. Preference for male offspring for cultural and economic reasons has led to the use of a number of sex selective practices over the years, notably in parts of India and China, but also elsewhere in South Asian, East Asian and Central Asian countries, as well as in countries such as Albania, Azerbaijan, Georgia and Armenia.

The phrase “missing women”, coined by Amartya Sen, refers to the observation that in parts of the world the overall ratio of women to men is suspiciously low. In his widely referenced article in the New York Review of Books, “More than 100 million women are missing” (1990), Sen wrote:

*The numbers of “missing women” in relation to the numbers that could be expected if men and women received similar care in health, medicine, and nutrition, are remarkably large. A great many more than a hundred million women are simply not there because women are neglected compared with men.*

In the two decades since Sen’s analysis, the phenomena of missing women has been addressed by numerous scholars, experts and campaigners worldwide, and new policies and laws have been put in place in countries where sex imbalance has been seen as an issue. Despite these efforts the process of tackling the underlining causes has been relatively slow. New technologies to determine child’s sex before birth have become more widespread since the 1980s and more recent research has suggested little change in the overall sex ratios. Estimates about the numbers of missing women vary according to different sources and the periods and geographical areas covered by different studies and reports, and it is difficult to determine accurate figures due to continuing lack of reliable data on births and deaths in many countries. According to World Bank’s recent report “The World Development Report 2012: Gender Equality and Development”, excess female deaths account for “an estimated 3.9 million women each year in low- and middle-income countries. About two-fifths are never born due to a preference for sons, a sixth die in early childhood, and over a third die in their reproductive years.”<sup>1</sup>

### 1.1 Sex ratio

Sex ratio is defined as the ratio of males to females in a population, and is expressed as the number of males per either 100, or in the case of India, 1000, females (see Box 1). As outlined in more detail in the subsequent chapters, the key research in this area tends to examine at least three variables: sex ratios at birth (SRB), child sex ratios (CSR) and overall sex ratios. In addition, a number of studies have also been comparing the distribution of sex ratios per birth order (first, second, third etc.), per region (comparing particularly the ratios of urban and rural areas), per religion or tribe, and per economic/educational status of households. Studies have also been comparing the sex ratios before and after significant legislation and/or government policies have come to force, such as the Pre-Conception and Pre-Natal Diagnostic Techniques (PNDT) Act in India and the one-child policy (OCP) in China.

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<sup>1</sup> See World Bank’s report “The World Development Report 2012: Gender Equality and Development at: <http://econ.worldbank.org/WBSITE/EXTERNAL/EXTDEC/EXTRESEARCH/EXTWDRS/EXTWDR2012/0,,contentMDK:22999750~menuPK:8154981~pagePK:64167689~piPK:64167673~theSitePK:7778063,00.html>

### **Box 1: Normal patterns in the sex ratio**

The sex ratio is defined as the ratio of males to females in a population, and is generally expressed as the number of males per 100 females. An exception is India, where the sex ratio is expressed as the number of females per 1,000 males.

- **The sex ratio at birth** (SRB) is usually expressed as the number of boys born alive per 100 girls born alive (OECD, 2010). In most countries, the normal SRB varies between 100 and 106 males per 100 females.

It needs to be noted, that SRB can be affected by a number of factors. Births, especially female births, can remain unregistered, and girls who are killed shortly after birth or given away for adoption may remain unaccounted for. Although the term “SRB” is being used, in most countries reliable birth registration data is not available, and therefore the childhood sex ratio (0-4 or 0-6 years) is used as a proxy. (Ganatra, 2008)

- **Child sex ratio** is used to refer to the ratio of boys to girls in a defined age group (typically 0-6 years)

Because of the greater biological vulnerability of boys, male mortality below 5 years is normally higher than female mortality. Consequently, the child sex ratio is normally lower than the SRB, and this decline continues as the cohort ages, often resulting in a sex ratio below 100 (fewer men than women) in the older population.

*Source: adapted from “Preventing gender-biased sex selection, an interagency statement OHCHR, UNFPA, UNICEF, UN Women and WHO, 2010*

Notable disparities in sex ratios can reflect a preference for boys as a result of social, cultural, and economic factors, discussed in more detail in the following chapters. In the past, this preference for boys resulted in the killing or neglecting of female infants either by giving them away, abandoning them, or providing them with inadequate healthcare comparing to boys (OHCHR, UNFPA, UNICEF, UN Women and WHO). Since the 1980s, the availability of ultrasound and other diagnostic technologies which can detect the sex of a foetus has in some parts of the world led to an accelerated increase in sex ratio imbalances at birth, particularly when looking at second- and higher order births (births following the first-born).

It is however important to remain cautious about the number of abortions and sex-selective practices before birth, as sex ratio at birth can be affected by a number of other factors. Female births can remain unregistered, and girls who are killed shortly after birth or given away for adoption may remain unaccounted for. Although the term “SRB” is being used, in most countries reliable birth registration data is not available, and therefore the childhood sex ratio (0-4 or 0-6 years) is used as a proxy. This ratio may also be affected by selective under-counting of girls in census enumerations and by discriminatory feeding and health care practices that cause an increase in post-natal mortality of girls (Ganatra).

## 1.2 Where are the missing women?

The concept of “missing women” refers to the imbalance of sexes and the excess number of males in comparison to females in some parts of the world. Until fairly recently, there were two main explanations for the imbalance of sexes – one biological, and one cultural. Oster, for instance, attributed the bias to hepatitis B. According to her widely debated analysis women carrying the hepatitis B virus appeared to give birth to a higher ratio of boys, possibly because the virus would raise female mortality rates *in utero* (Oster, 2005). This view however has been contested by a number of studies since (see e.g. Das Gupta, 2006, Ebenstein 2009) and has consequently been re-evaluated by Oster herself (2008) in her working paper “Hepatitis B Does Not Explain Male-Biased Sex Ratios in China”.

Some other studies have also shown that skewed sex ratios may partly result from more natural/biological causes. As Anderson and Ray point out, despite the widespread international focus on missing women in India and China, the number of missing women as a proportion of the *total* female population is in fact larger in sub-Saharan Africa. Using historical data, they also argue that a comparable proportion of women was missing at the start of the 20<sup>th</sup> century in the United States, just as they are in India, China and sub-Saharan Africa today (Anderson and Ray). These studies, however, are based on the overall sex ratio of countries and regions, which yield different results than analysis looking into sex selective practices and sex ratios of births and children.

To look at the concept of missing women with reference to discriminatory practices, it is observed that a large percentage of missing women in China are located before birth and infancy, whereas in sub-Saharan Africa missing women are spread over the entire age spectrum. In India, on the other hand, the main cause of excess female deaths is cardiovascular disease amongst older female population which, according to their findings, outstrips missing females at birth. The notable finding here is that congenital diseases at infancy as well as injuries account for a suspiciously large total of excess female deaths. The “injuries” category, in particular, calls for more detailed examination as it may have links to discriminatory practices. (Anderson and Ray)

As outlined in more detail in the subsequent chapters, governments of countries with seemingly skewed sex ratios have responded by introducing various laws and policies to curb sex selective practices (see Table 1).

**Table 1 Laws and policies relating to sex selection and abortion in selected Asian countries**

Country	Prenatal sex determination	Abortion
<b>China</b>	Banned since 1989. Penalties include fines, revocation of licence. Pre-implantation sex selection also prohibited.	Available and widely accessible since 1953. Sex selective abortion prohibited since 1994, though no criminal penalties.
<b>India</b>	Banned since 1994. Pre- and post-conception techniques prohibited from 2002. Penalties include seizure of machines, fines, jail terms and revocation of license.	Since 1971, abortion legal to 20 weeks for a broad range of indications: risk to the woman's life, physical and mental health, contraceptive failure in married women, rape and foetal anomaly
<b>Nepal</b>	Banned in 2002. Penalties include 3-6 months imprisonment	Legalised in 2002. Available on request for 12 weeks and for limited conditions to 18 weeks. The law bans sex selective abortion; penalties include 1 year imprisonment.
<b>South Korea</b>	Prohibited since 1987. Penalties increased in 1994 to include imprisonment, substantial fines and revocation of licence	Legalised in 1973 and allowed to save the life of the woman, for rape, incest, and some birth defects and medical conditions. In practice, abortion widely available.
<b>Vietnam</b>	Determining sex through traditional or modern means prohibited in 2003. Violations can be fined.	Legal since 1960. Sex selective abortion banned in 2003. Penalties include fines.

Source: adapted from Ganatra (2008)

### 1.3 Reasons for sex selection

Expressions such as “son preference” and “daughter aversion” often used in the context of sex selection may actually be over-simplifying the underlining issues behind male preference, as they tend to direct attention to personal choice and emotional affect (Sen, 2009). In fact, studies point to complex and varied historical, cultural and economic factors that manifest as lower sex ratios. Son preference is deeply rooted in a number of societies, and is linked to a broader culture of gender inequality and discrimination against women. Each sex selective method, from pre-determination of baby's gender to infanticide and neglect, have serious legal, ethical, health and human rights implications and potentially serious longer-term consequences damaging to the societies they are being practiced.

The underlying reasons for son preference are often economic. A strong son preference can result from a tradition of inheritance that goes to sons, a reliance on sons to provide economic support and ensure security in old age. The dowry system<sup>2</sup>, as practiced for example in India, and the related financial

<sup>2</sup> In India, **dowry** (known as *Dahej* in Hindi) is the payment in cash or some kind of gifts given to bridegroom's family along with the bride. Generally they include cash, jewellery, electrical appliances, furniture, bedding, crockery, utensils and other household items that help the newly-wed set up her home. Paying dowry is prohibited under The 1961 Dowry Prohibition Act in Indian civil law and subsequently by Sections 304B and 498a of the Indian Penal Code (IPC). (Source: Wikipedia)

hardship on raising girls has also been suggested as a factor, a view somewhat contested by recent studies (see e.g. Guilмото; Nandi and Deolalikar; Ganatra; Das Gupta) which suggest that in India the sex selective practices are in fact being embraced by wealthier, educated households in urban areas. There may also be reasons relating merely to traditions and conventions, such as transmission of family names. Having a son can be seen as a vital aspect of respecting the family lineage.

A slightly different reason for parents to use sex determination techniques for sex selection is family balancing. Studies show that parents who already have two or more children of the same sex may want to choose the sex of the next child in order to balance the sex composition of their family. While there is evidence to show that the children born after the first child being a daughter are more likely to be sons in both China and India (Bhalotra & Cochrane), therefore suggesting son preference, family balancing does not necessarily lead to the selection of male embryos/foetuses in other countries.

As demonstrated in subsequent chapters, declining fertility and either societal pressures or personal preference for having small families may also act as incentives to choose the sex of their offspring. The one-child policy in China, as argued in Chapter 3, may indeed explain the skewed birth ratios in the country.

## 1.4 Overview of terminology and definitions

### 1.4.1 Gendercide

The notion of gendercide was developed as a way to understand the role that gender plays in genocide and mass killings. The term, most often defined as *gender-selective mass killing*, was first introduced in Mary Anne Warren's *Gendercide: The implications of Sex Selection* (1985). Citing the Oxford English Dictionary definition of genocide as "the deliberate extermination of a race of people," Warren wrote:

*By analogy, gendercide would be the deliberate extermination of persons of a particular sex (or gender). Other terms, such as "gynocide" and "femicide," have been used to refer to the wrongful killing of girls and women. But "gendercide" is a sex-neutral term, in that the victims may be either male or female. There is a need for such a sex-neutral term, since sexually discriminatory killing is just as wrong when the victims happen to be male. The term also calls attention to the fact that gender roles have often had lethal consequences, and that these are in important respects analogous to the lethal consequences of racial, religious, and class prejudice.*

However, the difficulty with using the term gendercide is at least two-fold. As argued by R. Charli Carpenter (2002), the term confuses both the connection between *gendercide* and *genocide* and the terms *gender* and *biological sex* (Carpenter). In genocides, it is most often not men or women as such, but men or women of a *particular group* who are targeted (e.g. Rwanda 1994, Bosnia and Herzegovina 1992-95, Darfur, Sudan, 2003). This line has been blurred in many resources, including the materials displayed on the website of Gendercide Watch ([www.gendercide.org](http://www.gendercide.org)) where various wars with characteristics of genocide are somewhat confusingly being listed under the umbrella term gendercide. However, as an example, Bosnian Muslim women were not targeted only because they were women, but because they were *Bosnian Muslim* women. If the sex of the victims was the key characteristic, then women of Serb ethnic group would have been targeted too. Similarly, some resources imply that wars amount to gendercide because of the systematic killings of men. The fact that more men than women may die in particular instance such as warfare is, according to these arguments, taken to mean that one sex versus the other is being targeted because they are members of that sex. Adam Jones, for instance,

has written about the mass killings and genocidal slaughter of non-combatant men. He argues that the mass killing of particularly “battle-aged” men can be considered as a definitional element of contemporary warfare, due to its frequency across cultures and conflict types. (Jones) Similarly, David Buchanan argues that “the evidence from many conflicts confirms that simply being born male is a potential death sentence” and goes on to criticise human rights organisations, such as Amnesty International for only speaking of discrimination based on gender when the victims are women (Buchanan).

When researchers talk about biological sex of a person they mean the physical fact of being male or female. Gender, however, is by definition not a biological fact but a social and psychological fact. It involves beliefs of masculinity and femininity and ways of being male and female. Genocides and mass killings may indeed be *sex specific* (one sex is targeted over another) but not *sex selective* (one sex is selected over another). (Carpenter)

Making the distinction between sex specific and sex selective killings is important for policy makers who want to prosecute perpetrators or prevent future atrocities.

Another issue with the term *gendercide* is that it can easily blur the question of what counts as *mass killing*. (Carpenter)

**Mass killing:** It has been argued that cumulative cases of murder, such as sex-selective abortions or even domestic abuse, amount to *gendercide*, and are equal to killing several thousands of men/women in a single context. But it is debatable whether historical pattern of killing really amounts to the same thing as a large scale massacre in a given situation.

**Mass killing:** To describe e.g. abortions, even when performed distinctly for sex selective reasons, as “*gendercide*”, a mass killing, would imply abortions as such could be considered killings, which is a moral debate best left to other discussions, even though abortion in most countries worldwide is illegal after a certain months.

Overall, the somewhat emotive term *gendercide* is seen most often in campaign literature, and by reports published by NGOs, activists and human rights campaigners, however it is used considerably less in academic resources which use more specific terminology, as outlined below.

#### 1.4.2 Sex selective practices

In the light of the above, and to avoid confusion about terminology, the somewhat ambiguous and emotive term *gendercide* will not be used in this study, but it will instead refer to **sex determining** and **sex selective practices** and preference for male offspring in particular countries and societies.

Modern day sex selection is a two-step practice. The first step includes methods for *sex detection* (amniocentesis, ultrasonography, chorionic virus sampling, and simple blood tests on the pregnant woman). The second step is the *act of choosing* whether or not to undertake or continue the pregnancy based on the desired sex. (Sen, 2009) The use of sex detection techniques other than ultrasound, such as amniocentesis and chorionic virus sampling, are not common because of their risk and high cost. This paper will therefore focus on ultrasound used as a sex detective method, post-conception practices such as abortion, and, to lesser extent, post-birth practices such as infanticide (sometimes referred to as *femicide* when discussing killing of female children) and neglect. Sex selective adoption (either

adopting/buying boys or giving female offspring for adoption) is a form of sex selection which is not yet very well documented and will therefore not feature on this study.

Pre-natal sex detection technology is improving continuously, enabling more reliable resolution of the foetal image earlier in pregnancy. At the same time, the development of smaller and more mobile ultrasound scanners has increased market penetration and rural households are rapidly catching up with urban households (Bhalotra and Cochraine).

However it is still very difficult to establish whether a woman is having an abortion following an ultrasound for sex selective, or other reasons. It is equally as difficult to prove to what extent ultrasound is being used to monitor foetal health or for sex determination with subsequent selective abortion of female foetuses (Jha et al.) Still, some conclusions could be made about the extent of sex selective abortions, particularly based on the visible patterns in second- and higher order births where the likelihood of male offspring grows both in India and in China.

## 2. MISSING WOMEN IN INDIA

*Grooming a girl is like watering a neighbour's garden (Indian proverb)*<sup>3</sup>

Despite strong economic growth, gender inequality remains a major concern in India, and international attention over the years has yet to have a measurable effect on e.g. practice of sex-selective abortions. Considerable amount of knowledge on sex discrimination in India has been accumulated over the last twenty years. Moreover, detailed statistics from various sources exist that describe several aspects of sex discrimination – such as sex ratio at birth (SRB), child sex ratio (CSR), female excess mortality and abortion practices – at various scales of analyses (state, district, municipalities) and for many different subpopulations (classified by age, religion, literacy rate, etc.)<sup>4</sup>

India's 2011 census showed a serious decline in the number of girls under the age of seven. In 1961, for every 1,000 boys in this age group there were 976 girls, but the figure has dropped to 914 by 2011 (Jha et al. 2011). Although the number of women overall is improving thanks to e.g. improved life expectancy, India's ratio of young girls to boys is one of the worst in the world after China.

### 2.1 History of gender bias in India

The masculine nature of Indian population has been a matter of concern since the first Indian census in 1871, when there were 5.5 million fewer females than males (Natarajan, 1972, Subramarian & Corsi). For centuries, son preference in India has been expressed in female infanticide and excess mortality amongst girls and women, associated with their endemic neglect. However in the absence of reliable statistics, it took decades for statisticians to make sense of this apparent imbalance, and to establish that the inflated sex ratios observed in many parts of the country were directly related to unusually high mortality levels among women of all ages. Historical data for India show the overall sex ratio of the population steadily increasing, according to census data going back to the early 20th century (Visaria 1971). It has only been since the 1981, however, that the sex ratio at birth in particular has been shifting significantly in favour of males, while the all-age sex ratio has stabilised.

The practice of female infanticide was detected early on in some provinces of West India, but sex ratio remained high also due to high mortality conditions amongst young adult women (maternal mortality) and even among some older groups. It has been argued that since the 1920s health facilities, improved nutrition and better protection against epidemics and death were geared more towards ensuring survival of boys and men, which was considered the main objective for many households and communities (Guilmoto).

### 2.2 Current characteristics of sex imbalance: economic status, higher-order births, region and religion

Unlike in China, in India families do not face mandated fertility limit, but in recent years are choosing to have fewer children, due to economic development. Educated Indian women and families, in particular, prefer fewer children, which is thought to reflect higher opportunity costs of child bearing in the labour market, and a taste for child "quality" rather than quantity (Ebenstein, 2009).

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<sup>3</sup> Quoted in Sharma (2008)

<sup>4</sup> The major sources to study the sex-ratio scenario in India are the following: 2011 Census of India (on last births and child population by population characteristics), National Family and Health Survey rounds (on births and child mortality by characteristics of parents), Sample Registration System (for vital statistics).

Kulkarni (2007) estimated a deficit of girls in the 0-14 age group of nearly 10 million in 2001, of which 38% was attributable to excess female mortality and the remaining 62% to abnormal SRB as well as errors such as mis-reporting. He also estimated an annual average of 612,000 sex selective abortions during 1981-2005. Of the estimated total numbers of abortions, this would constitute between 5-7%.

An important characteristic is the distribution of sex imbalance according to parity, order of births (first, second third etc.). Recent studies (see e.g. Jha et al. Nandi and Deolalikar, Jayarar) show that the sex imbalance is much less visible amongst the first births, indicating that most parents would not use sex selective technologies to determine the sex of their first-born. However, if the first child is a girl, the sex ratio changes dramatically for the second child. Moreover, if the first child is a boy, the sex does not seem to matter for the second child. These studies have found that the main issue in India is with the second child, especially since a two-child family appears to be the norm, at least in urban areas (interview with Subramanian, 2012). However there seems to be a blurred line between what constitutes as simply an act of "family balancing" and what is considered discriminatory sex selection when people are using modern technologies to manage their family composition.

Table 2 below looks at sex ratios in second children depending on the sex of the first child. The sex ratio in the second child if the first was a girl fell to 716 (CI: 672 to 762) girls per 1000 boys. The difference from the overall sex ratio of 910 girls was statistically significant ( $P < 0.001$ ). In contrast to this, there was an excess of girls, if the previous child were a boy. The sex ratio was 1140 girls per 1000 boys (CI: 1072 to 1212) ( $P < 0.001$ ) (Sahni et al.)

**Table 2 Sex ratio among the second order babies, depending on gender of first-born**

A	B	C	D
Year	Sex ratio (95% C.I.) when first child is female. [N = Total number]	Sex ratio (95% C.I.) when first child is male. [N = Total number]	Difference between sex ratios <sup>#</sup> . (95% C.I.)
1974–1975	754 (658 862) P<0.01* [N = 854]	1266 (1107 1452) P<0.001* [N = 852]	0.13 (0.08 to 0.18)*
1984–1985	865 (773 967) P = 0.38 [N = 1225]	958 (858 1070) P = 0.37 [N = 1255]	0.03 (-0.01 to 0.06)
1994–1995	610 (541 686) P<0.001* [N = 1167]	1213 (1085 1357) P<0.001* [N = 1239]	0.17 (0.13 to 0.21)*
2004–2005	629 (541 728) P<0.001* [N = 741]	1222 (1059 1412) P<0.001* [N = 753]	0.16 (0.11 to 0.21)*
All years	716 (672 762) P<0.001* [N = 3987]	1140 (1072 1212) P<0.001* [N = 4099]	0.12 (0.09 to 0.14)*

P value compared to the overall sex ratio of 910 for the period 1905–2005.

<sup>#</sup>Difference in proportion of sex ratios in column B & C.

\*Significant.

doi:10.1371/journal.pone.0002224.t004

Source: Sahni et al. 2008

Jha et al's analysis also confirmed two other important aspects of the sex ratio in India, both of which contradict some previous studies and assumptions.

- 1) The sex imbalance at birth seems to be particularly concentrated in households with high education and wealth
- 2) The overall problem of sex imbalance seems to arise throughout India, including Kerala, which is often characterised as a model state for social development and gender equality.

To support the first point, Subramanian and Selvaraj found in their social analysis of the distribution of sexes among infants that the odds of having a male infant increased with income quartiles. Other recent research also points to the positive linkage between abnormal sex ratio and better socio-economic status and literacy. In fact, it can even be shown that, all other things being equal, female literacy and other economic indicators tend to increase with the sex ratio of children, a finding which contests the assumption that improvement in women's education, standard of living and modern employment is a key to social development. Their findings suggest that neither improvements in socioeconomic circumstances nor introducing policies that are not aligned with societal norms and preferences are likely to normalise the sex imbalance in India (Subramanian & Selvaraj).

The second point about regional characteristics is also much analysed issue. A recent study by John et al. analysed selected districts in five of the worst affected states (Madhya Pradesh, Rajasthan, Himachal Pradesh, Haryana and Punjab) and concluded that there is a clear "daughter aversion" in these districts. Another study also found that whilst the highest overall male-female ratio was in urban rather than rural areas, there are notable variations in these ratios by states. Punjab has an exceptionally high ratio (137 males to 100 females) while Karnataka has a very low ratio, with a higher number of females than males (95 to 100). The high ratios in Punjab and Haryana are seen particularly amongst higher-order birth. While the proportion births in these regions amount to less than a quarter of all pregnancies, among these births the SRB may increase to as high as 130, and these additional male births may have followed one or more abortion attempts (Subramanian and Selvaraj). The capital Delhi's overall ratio amongst 0-6 age group is also very low with 836 girls to 1,000 boys, and it has registered a decline since the last census. Almost all ultrasound clinics in the area have the mandatory board outside, proclaiming that they do not carry out illegal sex determination tests. However it is argued that most people in the city know where to go when they need an ultrasound or an abortion. (BBC News, South Asia, 23 May 2011)

There are also some notable differences between sex ratios in different religious groups. Some groups, such as Sikhs or Jains, exhibit extreme sex ratio values, while Christian and Muslim groups have sex ratios closer to normal (see Table 2)

**Table 3 Sex ratio of births by religious groups (normal sex ratio 100-106)**

Religion	Sex ratio of births in 2000
Hindu	110.9
Muslim	107.4
Christian	103.8
Sikh	129.8
Buddhist	108.4
Jain	118

Source: Guilmoto, 2007

According to Subramanian, infanticide, the killing of (female) children after birth, does still happen in some areas, but not on a pan-Indian scale. The few communities where these are known to take place are simply not large enough to distort the sex ratio of the whole population (interview with Submaranian, 2012)

Some researchers have noted that in recent decades the overall sex ratio of the population has in fact moved closer to the biologically normal level in India. (Dyson; Klasen and Wink). However they find that this trend is not driven by improvements in the sex ratios at birth or in the sex ratios of children, but by improvements in the sex ratios of adults. Adult female mortality levels have declined, partly because fertility decline reduces maternal mortality and depletion. Still, they conclude that the latest data seem to suggest that even the child sex ratios are peaking and are beginning a turn toward more normal levels. The rate of increase in child sex ratios had slowed in most states by the 1990s, with the exception of the northwestern states which have the highest child sex ratios, but which account for less than 5 percent of the country's population.

## 2.3 Government and civil society responses

### 2.3.1 PNDT Act

The national Pre-Conception and Pre-Natal Diagnostic Techniques (PNDT) Act of 1994 (see Box 2), implemented in 1996, banned sex-selective abortions in those India states which had not legislated such policy. Its provisions were further expanded in 2003, and the government has since taken steps to improve enforcement of the law. (Nandia and Deolalokar)

#### **Box 2: Provisions under the 1994 Pre-Natal Diagnostic Techniques (PNDT) Act and the expanded 2003 Pre-Conception and Pre-Natal Diagnostic Techniques (Prohibition of Sex Selection) Act**

##### **1994 Pre-Natal Diagnostic Techniques Act (PNDT) Act**

- Regulation of the use of pre-natal diagnostic techniques for the purpose of detecting genetic or metabolic disorders or chromosomal abnormalities or certain congenital malformations or sex-linked diseases
- Prevention of the misuse of such techniques for the purpose of pre-natal sex determination leading to female feticide

##### **2003 Pre-Conception and Pre-Natal Diagnostic Techniques (Prohibition of Sex Selection) Act**

- Prohibition of sex selection before and after conception
- Regulation of pre-natal diagnostic techniques for the detection of genetic abnormalities by restricting their use to registered institutions. The Act allows the use of these techniques only at a registered place for a specific purpose and by a qualified person, registered for this purpose
- Prevention of misuse of such techniques for sex selection before or after conception.
- Prohibition of advertisement of any technique for sex selection as well as sex determination.
- Prohibition on the sale of ultrasound machines to persons not registered under this Act.
- Punishment for violation of the provisions of the Act.

*Source: reproduced from Subramanian & Selvaraj*

Scepticism about the effects of well-intended policies in India, including the PNDT Act, is common. The main challenge seems to be that the parties seeking (prospective parents) and parties offering (physicians) the illegal service of determining the sex of a foetus have no other incentive than moral conscience to comply with the PNDT Act. The incentives not to comply for both parties can be a real challenge. For parents, it enables the selection of the sex of their unborn child and, for physicians, it enables an opportunity to provide a service for which there is substantial demand. Notably, it has been estimated that the business of sex determination followed by sex selective abortion is worth at least US\$100 million per year (Subramanian). Prenatal sex selection is profitable for both the suppliers of ultrasound scanners and other equipment and private medical practitioners (George, 2010).

However, despite the disbelief in effectiveness of regulations, some recent studies do suggest that the PNDT Act has had a positive impact on the sex ratio, in that the law has been successful in hindering any further worsening of the sex imbalance. According to a recent study, which is the first to explore the causal impact of this major legislation on the child sex ratio, this ratio in India would have declined by another 13-20 points, or an additional 51,000 female foetuses in the possible absence of the Act. (Nandia and Deolalokar)

The PNDT Act is one of a range of interventions being used to combat gender imbalance. Others include programmes such as Balika Samridhhi Yojana, started in 1997, which provides monetary incentives for the education of girls from poor families. Similar programmes have been put in place on Tamil Nadu, (Cradle Baby Scheme in 1992), Andhra Pradesh (Girl Child Protection Scheme 1996-7) and a few other states. However these programmes have generally low population coverage rates. In addition, the government has also been at the forefront of changing inheritance laws with a view to reducing son preference. Until recently, inheritance laws were largely discriminatory against women. In 2004, the government amended the Hindu Succession Act of 1956 to establish equal property rights for male and female children. The absence of formal social safety nets – particularly pension schemes – reinforces son preference, since the care of elderly parents is typically the son's responsibility. Direct cash transfer programmes, such as the National Old Age Pension Scheme (2007) for the elderly poor have potential to reduce the motive for son preference. (Nandi & Deolalikar)

Numerous advocacy programmes have also been conducted at various scales focusing on the issue of pre-natal sex selection. These activities are carried out mostly by civil-society organisations and public bodies, often with support from international agencies such as UNFPA, and target a wide variety of groups, such as women, the youth, the media, medical associations, NGOs, elected representatives, government administration, etc. Religious organisations have also been enlisted in some campaigns (Guilmoto).

### 3. MISSING WOMEN IN CHINA

As with India, researchers have long been concerned with the unusually high ratio of males to females in the Chinese population. The high gender disparity particularly among Chinese newborns has caught the attention of demographic experts nationally and internationally since the mid-1990s, following Amartya Sen's findings in the early 1990s. Although rapid industrialisation and declining fertility have reshaped China in the past four decades, sex preferences seem to have survived the transition (Ebenstein 2009).

Tiefenbrun and Edwards (2008), amongst others, have studied the interconnection of historic, legal and cultural features that result in the perpetuation of discrimination against women in Chinese society. According to their analysis, China is facing a demographic crisis, as women are "bought and sold, murdered and made to disappear in order to comply with a governmental policy that coincides with the cultural phenomenon of male-child preference".

#### 3.1 Women's status in Chinese society

*Daughters are like water that splashes out of the family and cannot be gotten back after marriage (Traditional Chinese proverb)*

Women's inferiority is deeply ingrained in the Chinese culture, supported by the Confucian view of a virtuous woman upholding 'three subordinations': be subordinate to her father before marriage, to her husband after marriage, and to her son after her husband died (Tieferbrun & Edwards). In traditional Chinese rural society, only sons can inherit family properties and host their parents' funeral ceremonies, as well as carry on family names (a common practice in many countries worldwide), and consequently having a son is extremely important to the family. The strict patrilineal family system (child belongs to the father's lineage) vests responsibilities upon male offspring for economic-socio cultural and religious functions (Li).

In Chinese culture, girls typically marry into the husband's family, leave home, and are expected to take care of their husband's parents. Since only boys can continue the patrilineal family line, girl babies are seen as financial burdens, unable to look after their elderly parents who don't get sufficient economic support from the inadequate social services system. Women have to depend on men, which results to women's low status (Skinner, Das Gupta et al. 2004) Bossen (1999) has pointed out that Chinese women have often been portrayed as a unified group sharing the same experience of devaluation and subordination to males. To a great extent, state policies also affect equity of sexes (Murphy, Das Gupta et al. 2004). When male-dominated family power is replaced by a country's male-dominated social systems, laws, ideologies and resource allocation, control over women becomes part of the public patriarchy. This combination of both private and public patriarchy constitutes an entirely dominant system, which keeps women in a firmly subordinate position (Chow and Berheide, 2004).

While women's status has greatly improved in contemporary China, traditional culture and customs delay this process, and the problem cannot be solved merely through economic development (Chu), as also seen in the case of India.

#### 3.2 One-child policy

Historically, Chinese parents have favoured large families and have often directed family resources to sons at the expense of daughters (Ebenstein 2009). However, the status of women was recognised

during the leadership of Mao Zedong (also Mao Tse Tung), the founder of the People's Republic of China, who stayed in power from 1949 until his death in 1976. Mao's proclamation "Women hold of half of the sky" reflects his view that there could be no emancipation of humanity without the participation and emancipation of women. Furthermore, in 1955, Mao insisted that "In order to build a great socialist society it is of the utmost importance to arouse the broad masses of women to join in productive activity. Men and women must receive equal pay for equal work in production. Genuine equality between the sexes can only be realized in the process of the socialist transformation of society as a whole."<sup>5</sup>

As the population grew rapidly, Chinese policymakers felt compelled to limit fertility, and the post-Mao Communist Party began enacting a series of fertility control policies, culminating in the one-child policy (OCP) in 1979. It is argued that the family planning became a revolutionary motto that took hold of the people by subtle forms of brainwashing, evidenced by advertisements, billboards, books, cartoons, movies, news, paintings etc. The sacrifice of having only one child became routinely glorified as obedience to duty and expression of love of one's country (Tierfenbrun and Edwards).

OCP, referred in China as "family planning law", applies currently to approximately 60% of China's population (Feng 2005), officially restricting married, urban couples to having only one child, while allowing exemptions for several cases, including rural couples, ethnic minorities, and parents without any siblings themselves. The policy is enforced at the provincial level through fines that are imposed based on the income of the family and other factors. The result of varying fertility policies is an effective national fertility policy of 1.47 children per couple (Feng 2005).

Analyses of trends in the sex ratio at birth in China have highlighted the importance of the OCP as a key moment in the rise of sex ratios at birth, and many studies (see e.g. Bulte, Heenrik & Zhang) have explored the contribution of OCP in distorting sex ratios. When OCP meets the traditional preference for sons, the outcome can often be either sex selective abortion or abandonment. Families that need a son may keep their first daughter and try again (most rural families are allowed to have a second child if their first child is a girl – a telling exception to the policy). However if they bear another girl, abandonment may be their only option (Waldmeier).

Focusing on Chinese families with more than one child, Hesketh, Lu and Xing (2005), Das Gupta (2005) and Zhu, Lu and Hesketh (2009) demonstrate that sex ratios at birth (SRB) are not only increasing consistently with birth order, but actually vary by the sex composition of the existing children in the household. In other words, and similarly to India, although sex ratios are close to normal for first births, the sex ratio for second, third and fourth births is strikingly different, especially depending on the sex of the first-born. Table 3 below demonstrates how SRB tends to increase with birth order.

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<sup>5</sup> See quotations from Mao Tse Tung at <http://www.marxists.org/reference/archive/mao/works/red-book/ch31.htm>

**Table 4 Sex ratio at birth by birth order in 2005**

<b>Parity (order of birth)</b>	<b>Sex ratio at birth (boys per 100 girls)</b>
1 <sup>st</sup> born	108.4
2nd	143.2
3rd	156.4
4th	141.8

*Source: adapted from China's population census and population sample survey in 2005*

Recent estimates suggest that as many as 40 million women are “missing” in China, and it is argued that OCP is responsible for about half of these cases, even before the ultrasound technologies for prenatal sex determination were available. Bulte et al. (2010) have looked in detail into the interaction between OCP and distorted sex ratios. Their study shows that when policies reduce fertility to one or two children only, the incentive for sex selective abortion, neglect, or, in worst cases, infanticide is enhanced when the (prospective) offspring's sex is of the “wrong type”, in this case, female. Non-registration for the first or second infant is also common. In rural districts of China, the family planning rules are strictly enforced. Many women are afraid of the social stigma and large fines and penalties imposed on them for violating the one- or two-child limit. While families may be willing to pay the fine if a son is born, most would not consider paying fines for a daughter (Bulte).

### **3.3 Current characteristics of sex imbalance: prenatal selection, second-order births, trafficking**

A consensus has emerged that the sex ratio distribution in China is due to prenatal discrimination against female conceptions. The consensus is based on evidence from fertility surveys (Hull, 1990), field work (Junhong) and census data (Das Gupta, 2005, Zhu et al. 2009). The discrimination leads directly to the phenomenon of “missing girls”. From the census in 1990, Klasen and Wink (2002) estimated the number of missing girls to be 34.6 million, and the percentage of missing girls to be 6.3 percent. According to the 2000 census, the estimated number of China's missing girls was 40.9 million, reaching 6.7 percent (Li).

Recent evidence from China – data collected by the intercensus survey in 2005 – were analysed by Zhu, Lu and Hesketh (2009). They found that, while sex ratios were high across all age groups and residence, they were highest in the 1-4 age group. They estimated that in 2005 there were 32 million more males than females under the age of 20 in China, and that 1.1 million excess male births occurred that year. While there is a lack of reliable national data, findings at the sub-national level reveal high disparities in sex ratios at birth. Analysis of recent data shows that while SRB is more skewed in rural areas, the ratios in large cities (Beijing, Tianjin and Shanghai) had increased between 2000 and 2005 (Li).

Anderson and Ray, who have studied the distribution of “missing women” by age and disease in both China and India, discovered that the two countries have distinct age profiles of missing women. According to their study, a large percentage of missing women in China are indeed located before birth and in infancy, estimating that around 37-45% of China's missing women are due to prenatal factors alone. (Anderson & Ray) This finding is supported by researchers at Peking and Tsinghua University, who collected new data that tracks the differential diffusion of diagnostic ultrasound and used data on

recorded births. They conclude that the skewed sex ratios at birth are significantly influenced by prenatal sex selection and that the effect of ultrasound on child gender is predominantly a result of prenatal sex selection in areas under tougher enforcement of birth control when the one child policy was effective (Chen et al. 2010). It needs to be noted, however, that the relevant data relating to sex selective abortions are not easy to find especially in rural areas because the majority of these cases take place in secret (Li).

A recent paper by Wenhua (2011) finds strong association between son preference and second birth fertility in China, echoing the studies conducted in India, regardless of the OCP. "The rather skewed sex ratio of second birth implies that son preference accounts very much for the motive to progress to second birth for Chinese women." His analysis reveals a very clear motive that lacking a son triggers women in China to renew their child-bearing despite the fines associated with breaching the one-child regulations. This seems to indicate that households are willing to pay the fines for a male offspring.

Some studies suggest that sex selection, fuelled by male preference, has already led to increased trafficking of girls and women. Trafficking has many forms: the purchasing of women for brides, the purchase of a male son, or the sale of unwanted female children (Tiefenbrun & Edwards). Human trafficking in China is a lucrative international business that is expanding due to several factors: the aggressive implementation of the OCP, a faulty legal system, and the uncritical adherence to long-standing cultural traditions that devalue women. Trafficking and other consequences of skewed sex ratios are discussed in more detail in Chapter 5.

### **3.4 Government and civil society responses**

To protect women's rights and promote gender equality, the Chinese government has introduced a series of laws and regulations on equal rights regarding economic and political participation, education, property inheritance, marriage and old-age support. (Li) China outlawed sex-selective abortions in 1995 and in 2000 undertook a pilot campaign to raise awareness of the value of girls called "Care for Girls", which aimed to "improve the environment for girls' survival and development." The programme was initiated with support from the Information, Education and Communication Department of the former State Family Planning Commission (the present National Population and Family Planning Commission) and the Population and Economic Research Institute of Xi'an Jiaotong University.

This programme includes: financial help for 1- and 2-daughter families; sponsoring of girls' educational fees and increased pensions to families with daughters. Since the introduction of the program in Chaohu (a city in Anhui province), the local SRB went from 125 in 1999 to 114 in 2002. In response to this apparent success, the government expanded the program to 24 counties with high SRB rates in 2003-2004, and saw the average SRB in those counties drop from 133.8 in 2000 to 119.6 in 2005. Stipulation and initiation of a national "Care For Girls" campaign occurred in January 2006 - July 2006, with the goal of bringing the national SRB average to normal levels within 15 years. In January 2008, the government expanded on this effort by launching the "Care For Girls Youth Volunteer Action", beginning with more than 1000 students (mostly at the university level) directed at engaging in promotional activities and data collection (under the Chinese Communist Youth League) (Davidson, Bunnell and Yan).

So far, according to the UN inter-agency statement on gender-biased sex selection, these measures have had only limited results. In August 2011, a nation-wide, 18-month campaign was launched, aiming

at raising awareness on gender equality, severely punishing those involved in sex selective abortions and improving monitoring of medical institutions and practitioners. During the campaign from August 2011 to March 2012, efforts will be made to raise awareness of gender equality, to severely punish those involved in cases of non-medical sex determinations and sex-selective abortions, and to strengthen monitoring. "Doctors who violate the ban will be stripped of licenses or penalized, and involved medical institutions will also be given harsh punishments", said Liu Qian, vice minister of the Ministry of Health<sup>6</sup>

Many national intervention projects have not only been supported by local and central governments in China, but also by a broad spectrum of national and international research and civil-society organisations. Supported by international organisations – including UNFPA, UNICEF, UNIFEM, the Ford Foundation, Plan International and the Asia Foundation – some research institutes have collaborated with the government to study gender-based issues. The Asia Foundation currently assists civil-society organisations and the government to adapt to a new era of open politics and citizen participation, and to support further democratisation and socio-economic reform (Li). NGOs, such as the All-China Women's Federation (ACWF) and the Population and Family Planning Association (PFPA), also play a role in relevant national policymaking. This is particularly so in the corresponding monitoring that needs to take place, as well as in representing and protecting women's rights, and promoting international exchanges. The category of civilian organisations also includes women's organisations in academic, service and other domains; these usually focus on one specific problem concerning gender equity and women's development, and have been well developed since the 1990s. All in all, NGOs and civilian organisations could play increasingly important roles in improving women's development, and in ensuring environments conducive to girls' survival (Li).

There are also voices raising concerns about the challenges NGOs face in China. According to Tessa Dale from All Girls Allowed, an US-based NGO addressing the sex imbalance issues in China, there are actually very few national NGOs and agencies operating in the country due to difficulty in registering such organisations.<sup>7</sup>

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<sup>6</sup> [http://news.xinhuanet.com/english2010/china/2011-08/16/c\\_131053421.htm](http://news.xinhuanet.com/english2010/china/2011-08/16/c_131053421.htm)

<sup>7</sup> Based on the NGO listings per country at the World Association of Non-Governmental Organizations ([www.wango.org](http://www.wango.org)), there are only 63 NGOs operating in China, none of which have a specific focus on women. By comparison, there are: 3,284 NGO's in Africa 3,605 in South and Southeast Asia 882 in Latin America and 652 in the Middle East. Africa has 1 billion people. China has 1.32 billion people. Based on that, each NGO in Africa serves 304,507 people, while each NGO in China serves 30 million people.

## 4. MISSING WOMEN BEYOND CHINA AND INDIA – AN OVERVIEW

In addition to China and India, as outlined in previous sections, higher sex ratios at birth has been observed in other countries in Asia, such as South Korea about a decade ago and Vietnam today, as well as in a number of countries throughout Europe, especially Albania, Azerbaijan, Georgia and Armenia (see Table 5).

Sex ratio imbalances have also been seen among children of Asian origin parents in the United States and the United Kingdom (Almund & Edmund, Dubuc & Coleman; Hvistendahl). A recent article in the Guardian (23 February 2012)<sup>8</sup> suggests that consultants at British clinics are agreeing to abort fetuses based on unwanted sex. The UK Department of Health have consequently recently launched an inquiry following a newspaper (Daily Telegraph) investigation into sex selective terminations, where secret footage was taken of consultants actions at British clinics. In Canada, certain communities in British Columbia and Ontario, with large proportions of immigrants from China and India, are experiencing the same unusual sex ratios seen in those Asian countries (Almond, 2011). However, these imbalances do not influence the overall statistics of these countries.

Table 5 below lists countries with higher sex ratios at birth and amongst children under 15 years of age, and the significantly higher ratios are highlighted.

**Table 5 Countries with high sex ratios at birth (108 boys for 100 girls or more in 2012)**

	Sex ratio at birth (1997, boys per 100 girls)*	Sex ratio at birth (2012 estimate)**	Sex ratio of children under 15 years (2012 estimate)**	Total sex ratio (2012 estimate)**
<b>Europe (Council of Europe member states)</b>				
Albania	108	111	112	98
Armenia	105	112	115	89
Azerbaijan	105	114	116	98
Georgia	105	111	115	91
Kosovo		108	108	106
Liechtenstein	105	126	109	98
Macedonia	108	108	108	99
Montenegro	108	107	95	99
Portugal	106	107	109	95
San Marino	100	109	114	94

<sup>8</sup> Jasmine Coleman "Clinics granting sex-selection abortions to be investigated by health officials", The Guardian 23 February 2012

Asia				
China	111	113	117	106
Hong Kong	107	107	109	94
India	105	112	113	108
South Korea	114	107	109	100
Singapore	108	107	105	96
Taiwan	108	108	108	101
Vietnam	106	112	110	100
Tunisia	108	107	107	101
Latin America and the Caribbean				
Curacao		115	105	85
Grenada	102	110	106	102

\*The World Factbook 1997. CIA. Accessed 23 February 2012.

\*\*The World Factbook 2012. CIA. Accessed 23 February 2012.

The third column in Table 5 presents the sex ratio of all children under the age of 15 in the corresponding countries. Since mortality rates of boys in “discrimination-free countries”<sup>9</sup> are higher at each age than mortality rates of girls, the sex ratio of all children under the age of 15 should be equal or lower than the sex ratio at birth. Increasing sex ratios, as for example in India and China, as well as Albania, Azerbaijan, Georgia, and Armenia, can be the consequence of different circumstances. If sex ratios had been higher in previous years it would be the logical statistical consequence of calculating means (like in South Korea) and indicate an improvement of the situation. Anderson and Ray invested in “epidemiological transition”, examining if excess deaths of women could also “arise not from lack of ‘similar’ care for men and women but from the changing nature of disease environment” but could not prove this hypothesis. So higher sex ratios of all children under the age 15 compared to sex ratios at birth are most likely to be a sign of discrimination and neglect leading to higher female mortality rates. Other possible reasons, including the fact that girls are less likely to be officially registered at birth, also indicate acts of discrimination.

Female mortality rates at older age are also the main reason for missing women in countries in sub-Saharan Africa. There, the number of missing women (as proportion of the total female population) is largest (0.47%, 1.53 million in total) in comparison to those for India (0.34%) and China (0.31%) (Anderson and Ray 2010). Sub-Saharan African countries do not feature in table 5 since none of them has a higher sex ratio at birth than 106. Findings from Anderson and Ray conclude that missing females at birth do not exist in sub-Saharan Africa as a whole. While in India 11% and in China 37% of all missing women occur at birth, this is only the case for 2% of missing women in sub-Saharan Africa. Here, the

<sup>9</sup> Anderson and Ray (2010) use the group of Established Market Economies as defined by the World Bank: Western Europe, Canada, United States, Australia, New Zealand, and Japan.

majority of excess female deaths fall into the age groups 0-4 and 15-44, as consequence of different diseases, especially HIV/AIDS, and deaths occurring during childbirth.

After the collapse of the Soviet Union, Armenia, Azerbaijan and Georgia witnessed an upsurge in the ratio of boys to girls: the sex ratios rose from normal levels in 1991 to 110-120 in 2000. In Armenia and Georgia, the skewed sex ratio is particularly acute for the third birth (Meslé, Vallin and Badurashvili). Rise in the sex ratios at birth occurred simultaneously in all three countries. Despite the great differences between them in terms of ethnicity, religion, language and culture, the three countries share a high abortion rate. The same trend cannot however be observed in other former Soviet Union countries. In Ukraine, the Russian Federation, Kazakhstan, Uzbekistan, Turkmenistan, Tajikistan and Kyrgyzstan the sex ratio at birth has remained substantially unchanged since 1995 (Stump).

A recent report by Doris Stump, presented to the Parliamentary Assembly in September 2011, compiles the following government actions within Albania, Armenia, Azerbaijan and Georgia to stop the current trend (Table 6).

**Table 6 Regulation of sex selective practices in Albania, Armenia, Georgia and Azerbaijan**

<b>Albania</b>	<ul style="list-style-type: none"> <li>-No clear official guidelines on prenatal sex selection</li> <li>-According to national data on abortion, the main causes for abortions are social rather than related to sex selection</li> </ul>
<b>Armenia</b>	<ul style="list-style-type: none"> <li>- No ethics committee on gynaecologists and obstetricians yet</li> <li>- Abortion allowed until the 12th week of pregnancy</li> </ul>
<b>Georgia</b>	<ul style="list-style-type: none"> <li>-Prenatal sex selection for non-medical reasons not permitted</li> <li>-No monitoring, or sanctions for breaches of the regulation of prenatal sex selection</li> <li>-Only few civil society organisations are aware of the issues</li> </ul>
<b>Azerbaijan</b>	<ul style="list-style-type: none"> <li>-Sex selection for medical reasons not explicitly permitted</li> <li>-No sanctions against prenatal sex selection, no monitoring</li> <li>-No ethic body of obstetricians and gynaecologists</li> <li>-The authorities have taken measures to improve awareness and the information provision amongst the general public</li> </ul>

A positive example of a strategy to rebalance sex ratios comes from South Korea, where grossly imbalanced sex ratios have gradually begun to return towards normal. South Korea was the first country to report significant differential sex ratios at birth, suggesting a widespread practice of fetal sex selection (Chung & Das Gupta, 2007; Sharma). Beginning in the mid-1990s, the government advanced a public awareness campaign warning of the dangers of such distortions. With its more controlled health systems (compared to e.g. India and China) the country has been able to regulate sex determination tests more effectively (Kim). The decline has been dramatic – from the highest ratios of male to female births in Asia in the early 1990s to normal ratios by 2007. Chung and das Gupta (2007) found that these developments are associated with the country's rapid modernisation, increased urbanisation and education.

## 5. CONSEQUENCES OF GENDER BIAS – MISSING WOMEN, EXCESS MEN

The consequences of sex selective practices and son preference are manifold, as they produce an excess proportion of males in society, also referred to as surplus males. A significant bias in the number of boys being born leads in turn to large cohorts of young and unmarried men, “bare branches”<sup>10</sup>, over the years. Recent studies (Guilmoto; Zu, Lu, Hesketh, 2009) have pointed out that a significant adult male surplus after 2020 is unavoidable as a result of previous excess of male births since 1980. It is estimated that these men are likely to constitute 12-15 % of the adult male population of these countries by 2020. Some studies suggest that there will be around 30 million young surplus males will be seen in both China and India in the next decade. (Hudson and Den Boer, Ebenstein 2010 and Sharygin 2009)

The societal implications mean that a significant percentage of the male population will not be able to marry or have children because of a scarcity of women. In China, 94% of unmarried people aged 28 to 49 are male, 97% of whom have not completed high school, and there are worries the inability to marry will result in psychological issues and possibly increased violence and crime (Hesketh et al.) A number of assumptions have been made about the effects of a missing female population on surplus men, and the subsequent effects on the societies. It is hypothesised that failure to marry and have children will result in low self-esteem and increased susceptibility to a number of psychological problems (Das Gupta, et al 2003, Hesketh).

Secondly, since cross-cultural evidence shows that the overwhelming majority of violent crime is perpetrated by young unmarried, low status males, it is expected that these men are more prone to violent and anti-social behaviour and crime. Basing their analysis on studies on testosterone and human aggression throughout history, Hudson and Den Boer, for instance, have argued that compared to other males in society, “bare branches” are prone to seek satisfaction through vice and violence. They argue that in a system of too few women, the men who will marry are likely to be of higher socio-economic status, leaving the men who are poorer, less educated and less skilled unmarried. “These men are already at risk to establish a system based on physical force to obtain what they cannot obtain legitimately” (Hudson and De Boer).

Other studies have similarly suggested that the increase of violent and antisocial behaviour by surplus men will in turn pose a major threat to the overall societal stability and national security (Tieferburn & Edwards).

Since prenatal sex determination only became accessible and widespread from the mid-1980s, the large numbers of young men have only now reached reproductive age, and the consequences of this male surplus in this age group are still largely speculative (Hesketh). Whatever the effects of female deficit are to the mental and physical well-being and behaviour patterns of these surplus males, it seems justified to argue that spiralling sex ratios will not contribute to the positive development of a society.

There have also been real concerns that the male bias will lead to rise in the sex industry and its potential consequences such as increases in trafficking, increased violence towards women, child brides, sexually transmitted disease (STD) and HIV/AIDS (Tucker et al. 2005). Reports that Chinese gangs

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<sup>10</sup> The Chinese have a special term for these men: *guang-gun'erm*, meaning “bare branches”, branches of the family tree who will never bear fruit, but which may be useful as “bare sticks” or clubs (see e.g. Hudson and De Boer 2007)

are beginning to traffic Vietnamese and North Korean women for would-be husbands are alarming and suggest the Chinese “marriage market” squeeze could be an even larger, international policy issue (see e.g. Ebenstein 2009, Zhao 2003, Tiefenbrun and Edwards).

With regards to health concerns, it has been argued that alongside a rapid increase in STD incidence across developed parts of urban China, surplus men could become a significant new HIV risk group. The anticipated high sexual risk among many surplus men and injecting drug use among a sub-group of surplus men may create bridging populations from low to high risk individuals (Tucker et al.).

Another suggested consequence is an increase in the rate of women’s suicides. In Europe, for instance, male suicides far outnumber female suicides, but countries with deficit of girls and women, female suicides outnumber male suicides. Furthermore, some estimates suggest that approximately 55% of female suicides worldwide are amongst Chinese women of childbearing age (Hudson and Den Boer, 2007). Similarly, according to the World Health Organization, female suicide rates in China are among the highest in the world, suicide being the most common form of death amongst Chinese rural women aged 15-34 (WHO 2009). They note, however, that this situation has shown signs of improving over the recent years. It has been suggested that young women kill themselves because they cannot live with the knowledge that they have aborted female foetuses, or in some cases killed their baby girls, or because they were not able to give birth to a boy. However there is very little reliable data to support this argument (UN interagency statement on preventing gender-biased sex selection)

## 6. CONCLUSIONS AND RECOMMENDATIONS

As demonstrated throughout this paper, the fate of tens of millions of “missing women”, and the consequences of the resulting sex imbalance in countries including China and India have been recognised and widely documented in demographic, medical and economic literature. However because of the lack of reliable data and monitoring of births and child mortality in countries with distorted sex ratios, it is still difficult to estimate the real scale of girls and women going “missing” as a direct consequence of son preference and sex selective practices.

As cautiously suggested by some recent findings (Das Gupta et al. 2009), an overall decline in national child sex ratios may in fact be imminent in both China and India. According to their review, the data indicate that current child sex ratios are peaking in these countries, and in many subnational regions are beginning to trend toward lower, more normal values. This suggests that, with continuing economic and social development and vigorous public policy efforts to reduce son preference, the “missing girls” phenomenon could eventually disappear in Asia.

Nevertheless, much remains to be done to accelerate the reduction of son preference, especially in China and northwest India, where child sex ratios remain high. The present trends of high sex ratios particularly amongst second or higher order births, the fact that improving education levels amongst women e.g. in India seems to have only increased the likelihood of these households to welcome sex selective practices, and the financial gains available to medical professionals providing those practices are trends which seem particularly hard to tackle. There are two main policy approaches: to outlaw sex selection, and to address and challenge the fundamental causes of son preference.

Governments and advocates seeking to reverse the gender imbalance have largely prohibited sex detection tests and/or sex selective abortion, and imposed sanctions, but such policies have been difficult to enforce and have met with only limited success. At the same time, as argued by e.g. Ganatra, such policies are starting to have adverse effects on the already limited access to safe and legal abortions for reasons other than sex selection. He goes on to argue that the sex selection issue is already being used as a platform for anti-abortion rhetoric by certain groups (Ganatra).

As recognised by a number of academics, policymakers and activists, the focus should continue shifting to addressing the conditions and root causes that drive son preference in different countries. Social and economic change, including a shift away from a farm-based economy and increases in nuclear families, urbanisation, greater workforce participation of women with better employment opportunities, improving women's educational opportunities, and parents having retirement savings for old age security are all contributing factors (Ganatra).

As demonstrated particularly in with cases in China and India, it seems that changes in abortion laws have not been effective. To a certain extent, bans on sex determination tests do have a place, but the successful implementation of the laws and restrictions depends on self-regulation by individual providers and the commitment to medical ethics and vigilance exercised by medical professional bodies (Ganatra).

The historical lesson to policymakers in family planning, as seen with the detrimental effects of one child policy in China, is that encouraging or, even worse, enforcing people to change their fertility behaviour without focusing on the reasons for their preferences may have damaging consequences. The only sustainable way to prevent further developments in sex selective practices is promoting the

equal value of sexes in every society. However, even if sex ratios do eventually normalise, it will take years for the adverse effects of past discrimination to play themselves out, for example in the marriage market.

## 6.1 Recommendations to the European Parliament and the wider international community

As outlined above, eradicating sex selective practices is a complex process which requires a range of inter-connected approaches and methods, from studying the root causes and cultural and socio-economic factors characteristic to countries where son/male preference exist, to campaigning for the rights and status of girls and women, and introducing laws and regulations. In many countries where sex imbalance is a cause of concern, the evidence is unfortunately still largely based on estimated numbers of birth sex ratios and excess female mortality rates due to a lack of reliable data. In India, for example, there is no system in place to count every child that is born and every child that dies, and the estimated figures are largely based on surveys conducted in different parts of the country.

The scope of the European Parliament (EP) in eradicating sex selective practices and challenging prevailing male preference depends somewhat on whether or not the countries in question are Member States of the EP itself or of the Council of Europe. Since both India and China are beyond a direct legislative influence of the EP, the recommendations with regards to these countries are more limited.

Other European bodies, such as European Parliamentary Assembly (PACE), which are part of the Council of Europe, have already highlighted sex selective practices with a focus on prenatal sex selection in the form of a Motion for a Resolution introduced in May 2010<sup>11</sup>, followed by a report to their Committee on Equal Opportunities for Women and Men by Doris Stump, the subsequent Recommendation 1979 (2011) and Resolution 1829 (2011)<sup>12</sup>. However, the Assembly's influence on the issue extends only to the ability to investigate, recommend and advise.

To address the issue outside of Europe, e.g. in India and China, the relevant EP sub-committees, such as Committees on Development (DEVE), Human Rights (DROI), Women's Rights and Gender Equality (FEMM) and International Trade (INTA) are recommended to cooperate in introducing the concept of missing women to the Parliament and keeping the issue firmly on the European agenda, echoing the aforementioned recommendations by the European Parliamentary Assembly. The issue of sex selection should also be incorporated in the renewed instruments of the Multi-Annual Financial Framework 2014-2020, as below.

The European Consensus on Development, following the objectives of Millennium Development Goals (MDGs), state that gender equality should be a "core part of all policy strategies" and goes on stating "The EU will include a strong gender component in all its politics and practices in its relations with development countries"<sup>13</sup> **DEVE**, with a mandate to monitor development spending, and make laws that frame EU's development and aid activities, could review the issue of missing women in developing

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<sup>11</sup> Sex-selective abortion – "Gendercide" Motion for resolution, presented by Mr Volontè and others, available at <http://assembly.coe.int/documents/workingdocs/doc10/EDOC12258.pdf>

<sup>12</sup> See Resolution at <http://www.assembly.coe.int/Mainf.asp?link=/Documents/AdoptedText/ta11/ERES1829.htm> and Recommendation at <http://www.assembly.coe.int/Mainf.asp?link=/Documents/AdoptedText/ta11/EREC1979.htm>

<sup>13</sup> The European Consensus on Development (2005) available at [http://ec.europa.eu/development/icenter/repository/european\\_consensus\\_2005\\_en.pdf](http://ec.europa.eu/development/icenter/repository/european_consensus_2005_en.pdf)

countries, and try to include these concerns into future aid programmes. This would mean, for example, tying the aid for countries which have been proven to have issues with continuing sex selective practices to tightening policies and control over preferential treatment of males. It is also critical to include concerns of continuing sex selective practices in developing countries in the upcoming Development and Cooperation Instrument (DCI), proposed to the EP by the European Commission and implemented for the seven-year period 2014-2020.

Similarly, **INTA** could ensure that human rights clauses relating to gender discrimination are included in the international trade and cooperation agreements.

Sex selective practices and preferential treatment of males in society are also human rights issues. **DROI** could organise a hearing or a discussion on the topic of missing women, which is also yet to get a mentioning on EU's Annual Report on Human Rights in the World, drafted in DROI, and in which human rights concerns of a number of countries are outlined. Similarly to DEVE, DROI should highlight the human rights implications of sex selection and consequent male bias worldwide in their upcoming European Instrument for Democracy and Human Rights (EIHDR), proposed to the EP by the European Commission.

**FEMM** lists as its responsibilities awareness raising activities, such as the promotion of women's rights in so-called third countries, as well as the follow-up and implementation of international agreements and conventions involving the rights of women<sup>14</sup>. The committee could include the concerns over missing women in their advocacy and awareness raising efforts beyond the European borders, and build on their recent (January 2012) workshop on Multi-Annual Financial Framework 2014-2020 from a Gender Equality Perspective.

**Delegations of the European Union** to China<sup>15</sup> and India<sup>16</sup> could also have a stronger role to play in highlighting the issue in their cooperation with these countries. Through the country-specific delegations, the EP could play an important role in proactively challenging states such as China to fully abandon coercive population limitation policies, such as the one-child policy, and to take more extensive steps to challenge negative attitudes towards women.

Different European bodies, as well as individual governments within the European Parliament, are encouraged to highlight the issue of missing women by applying diplomatic pressure on the governments of those states that tolerate the problem. The EP is also strongly encouraged to consult and cooperate with other international bodies who have already raised their concerns over missing women, such as the World Health Organization (WHO), OHCHR, UNFPA, UNICEF, and UN Women, who recently (2011) produced their joint statement on gender-biased sex selection, referred to in earlier sections of this study.

As illustrated in Chapter 4, departure from the natural sex ratio at birth has been observed in some Council of Europe member states, reaching worrying proportions in Albania, Armenia, Azerbaijan, and Georgia<sup>17</sup>

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<sup>14</sup> <http://www.europarl.europa.eu/committees/en/FEMM/home.html>

<sup>15</sup> [http://eeas.europa.eu/china/index\\_en.htm](http://eeas.europa.eu/china/index_en.htm)

<sup>16</sup> [http://eeas.europa.eu/india/index\\_en.htm](http://eeas.europa.eu/india/index_en.htm)

<sup>17</sup> None of which are Member States of the European Parliament but are members of the European Council

Article 14 of the European Convention on Human Rights and Biomedicine (“Oviedo Convention”) states “The use of techniques of medically assisted procreation shall not be allowed for the purpose of choosing a future child's sex, except where serious hereditary sex-related disease is to be avoided.” The convention is signed and ratified by most Member States of the Council of Europe, with an exception of a few countries, including countries such as UK, Ireland and Austria, but also two countries with alarmingly high sex ratios, Armenia and Azerbaijan.

With regards to these countries, and with the help of their in-country delegations/Parliamentary Cooperation Committees, the European Parliament could:

- Call on the authorities to investigate the causes and reasons behind skewed sex ratios at birth either through their Parliamentary Cooperation Committees
- Step up efforts aimed at promoting the signing and ratification of the Convention of Human Rights and Biomedicine, as well as the Convention on Preventing and Combating Violence against Women and Domestic Violence (see below)
- Encourage countries’ authorities to improve the monitoring and data collection of sex ratios at birth and to take prompt action to address possible imbalances.
- Promote research on the causes of prenatal sex selection and its long-term societal consequences.
- Encourage national ethics bodies to elaborate and introduce guidelines for medical staff.

The Council of Europe’s Convention on Preventing and Combating Violence against Women and Domestic Violence<sup>18</sup>, which opened for signatures in May 2011, doesn’t explicitly mention sex selective practices, but does include psychological violence in Article 33<sup>19</sup>. The pressure exerted on women by their husbands and families, forcing them to abort, can however be considered a form of physical violence (Stump). This Convention is yet to be signed and ratified by a large number of member states, which is where the European Parliament could do potentially do more to ensure consistency by encouraging more member states to sign and ratify the convention. A wider recognition and acceptance of this convention with the EC member states would be a clear indication of the European Council having a unified view on condemning discrimination of women more broadly, and setting a positive example to countries beyond its direct influence.

In addition, the following general recommendations are aimed equally at the European Parliament and its relevant committees as outlined above, and at other stakeholders, including the individual member states of the European Council and governments worldwide, international agencies and NGOs, academic community, activists and community groups.

- A thorough scientific examination into the root causes and ongoing policies and country-specific traditions which can lead to sex selective practices (e.g. dowry exchange)
- Supporting the implementation of policies relating directly to gender inequality, such as inheritance dowry, financing old age and other personal security issues, education and the determination of surname, and other proactive measures and women’s educational and economic independence and equal opportunities
- A detailed analysis particularly of the financial and economic incentives that may support sex selective practices, for both parents and medical practitioners and other individuals who might profit from these practices

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<sup>18</sup> <http://conventions.coe.int/Treaty/EN/Treaties/html/210.htm>

<sup>19</sup> “Parties shall take necessary legislative or other measures to ensure that the intentional conduct of seriously impairing a person’s psychological integrity through coercion or threats in criminalised”

- Collection of reliable data on sex ratios at births, child mortality, and recognized sex selective practices on micro-level, sub-national and national level, starting from small cohorts such as rural villages. In addition, data from a variety of existing sources including national censuses, registration systems, population surveys and qualitative studies need to be analysed.
- Informing, lobbying and monitor the medical community, promoting responsible use of technologies. Mapping out practitioners and abortion clinics, and providing more specialised training and information for medical staff. Moreover, looking at sex selection as a business; the financial gains made by medical practitioners and those who profit from supplying equipment for sex determining and selective practices is a real challenge that has wider policy implications.
- Further development of appropriate legislation, including more robust sanctions to those who breach the laws in countries where regulations have proved ineffective. Furthermore, indicators for tracking change and the impact of interventions such as changes in government legislation or nation-wide campaigns against gender imbalance. Methodologies to evaluate the impact of new policies and incentive programmes should be developed.
- An in-depth review of the possible detrimental health, economic and security consequences of surplus males

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## **Interviews**

Interview with S V Subramanian, Harvard School of Public Health, on 26<sup>th</sup> January 2012

Interview with Tessa Dale, from "All Girls Allowed" <http://www.allgirlsallowed.org/>, a Christian, US-based NGO aiming to "restore life, value, and dignity to girls and mothers, and to reveal the injustice of China's One-Child Policy", on 30<sup>th</sup> January 2012

Interview with Sarah Phelan, from European Parliament's DEVE committee on 22 February 2012

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ISBN: 978-92-823-3695-3  
doi:10.2861/66673

