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Developing Gender Statistics: A Practical Tool

Reference manual prepared by the UNECE Task Force on Gender Statistics Training for Statisticians with contributions from various experts

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NOTE

The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of the Secretariat of the United Nations concerning the legal status of any country, territory, city or area, or of its authorities, or concerning the delimitation of its frontier or boundaries.

Preface

Gender statistics is not a discrete or isolated field. It cuts across traditional fields of statistics, such as economics, agriculture, health and employment, to explore the differences that exist between women and men in society. Such information is vital to inform policy and decision-makers and to make advances towards achieving gender equality. The manual *Developing Gender Statistics: A Practical Tool* aims to guide statistical organizations in the production and use of gender statistics, building upon the seminal work *Engendering Statistics: A Tool for Change* by Statistics Sweden (Hedman et al., 1996).

Chapters 1 and 2 of the manual explain the importance of producing and analyzing statistics on gender differences. Chapter 3 provides guidance on data production and Chapter 4 looks in detail at selected topics relevant to gender statistics and the implications for data collection. Chapter 5 examines methods for improving the use of gender statistics through communication strategies and dissemination platforms such as interactive databases and websites.

An important component of any initiative to develop statistics on gender is advocacy and partnership building. Chapter 6 provides guidance on 'making it happen' through campaigning for top management support, creating legislation and defining a gender statistics program.

The United Nations Economic Commission for Europe wishes to acknowledge the cooperation with the World Bank Institute in preparing this manual. I hope that the manual will serve as a consolidated reference for any institution or individual interested in producing high quality information about gender differences, provide valuable guidance to producers and eventually contribute to evidence-based policy-making for accelerating progress towards gender equality.

Ján Kubiš
Executive Secretary
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1.1 Introduction

Gender statistics is not a discrete or isolated field. It relates to all fields of statistics and is a tool to facilitate the change needed to address gender issues. Identifying the information required to inform and understand the problems and goals connected with gender issues is essential to the production of gender statistics. Therefore, a policy-oriented approach rather than the simple disaggregation of data by sex is at the core of gender statistics.

Gender statistics is a field of statistics which cuts across the traditional fields to identify, produce and disseminate statistics that reflect the realities of the lives of women and men and policy issues relating to gender equality.

The development of gender statistics involves the same steps as the production of other statistics, but with specific regard to integrating gender issues and reflecting gender concerns. As Hedman et al. (1996) have already established, the main steps include:

a) selection of topics to be investigated
b) identification of statistics to be collected to reflect the gender issues in society
c) formulation of concepts and definitions that adequately reflect the diversities of women and men in society
d) development of data collection methods that take into account stereotypes and social and cultural factors that might produce gender-based biases
e) development of analyses and presentation of data that can reach policy makers and the largest audience possible.

This chapter will focus on some of the basic issues and challenges that are involved with developing gender statistics.

1.2 The importance of a gender perspective in statistics

The first challenge faced by advocates of a gender perspective in statistics is to convince statisticians, and sometimes even some potential users, of the importance and feasibility of this field of work. Many argue that gender is already fully incorporated in statistics or that it is not necessary since women and men already have equal opportunities in society (see Box 1.1 on frequently used arguments). This manual argues that a gender focus not only provides evidence of gender differences, but strengthens and improves the whole statistical system. Women and men continue to have different roles in society, different access to and control over resources and different skills and interests. Unless these differences are reflected in official statistics, statisticians will not fulfil adequately their mandate.

A starting point in the discussion of developing gender statistics is the distinction between two terms which are often confused: sex and gender. The difficulty of translating the term *gender* into languages other than English further contributes to the confusion in the use of these terms. Sometimes the simple categories of sex (male and female) and gender (masculine and feminine) are treated as if they were the same thing. They are not. Sex is a reference to the relatively fixed biological and physiological characteristics that define men and women. Gender is a reference to the relatively fluid socially constructed roles, behaviours, activities, and attributes that a given society considers appropriate for men and women[1]. The policy and research interest is almost always in gender, not sex, but examination of data by sex is the means to making gender-based analyses.

Sex-disaggregated data are needed to show the differences that exist between women and men in a given society. Data must be disaggregated by

[1] These definitions have been taken from the World Health Organization's website at http://www.who.int/gender/whatisgender/en/index.html

Box 1.1 Frequently used arguments against producing gender-sensitive statistics

"We already have gender statistics - all our data are sex-disaggregated"

The production of gender-sensitive statistics does not involve only the production of sex-disaggregated data. Sex-disaggregated data form one important component of gender – sensitive statistics. But for full gender sensitivity, the National Statistical System (NSS) also needs to be confident that it produces statistics in respect of all the key gender issues in the country, and that it covers issues (such as maternal mortality or prostate disorders) that might affect only one sex.

"Women and men in this country already enjoy equality"

Women and men will never be exactly the same. Biological differences will persist, as will some social differences. Gender statistics are needed to illustrate both how women and men differ and how they are similar. It is only on the basis of this information that governments can make sensible policy and be sure that policies in respect of gender equity are succeeding.

"It is normal to have differences in the labour market between women and men because women prefer to stay at home"

Gender-sensitive data do not present a value judgment on how the society should look. The task of the NSS is to produce data that accurately reflect the situation in the country. It is then up to the policy-makers and citizens more generally to decide whether the differences depicted between male and female are 'normal' or desirable.

"Adding breakdown by sex will cost too much"

For the most part, there is a minimal cost attached to producing gender statistics with existing instruments. In some cases, it simply involves the addition of an extra question or column specifying sex. In other cases, it might involve the addition of several questions. At analysis time, the main cost would be the time involved in running extra tabulations, but in many cases, sex can simply be added to existing tabulations. Significant cost is generally only incurred when a completely new investigation (such as a survey) is carried out.

"Disaggregating data by sex will adversely affect the quality of the data"

On the contrary, the integration of gender perspective will enrich the information available from the investigation and increase its explanatory value.

The disaggregation by sex also often provides the basis for more thorough checking of the accuracy of data collection and recording as it allows for additional logical checks.

sex in order to analyze gender issues. However, this alone is not always sufficient for gender analysis. For example, the disaggregation of victims of homicide by sex has some value, but information on the perpetrator and their relationship to the victim is also needed to understand if the homicide was committed in a family context or by someone unknown to the victim.

The concept of gender places focus not only on women, but on both women and men. This is important because policies and programmes affect women and men differently and because men's position in society is an important context for understanding women's position and vice versa. However, a focus on either men or women may also be appropriate in some cases. For example, some issues pertain to women but not to men, such as maternal mortality, while there are some health issues that are specific to men such as testicular cancer.

1.3 Intersection of gender with other social groups

The dissection of the population into men and women is usually cross-cut by other social groups. The nature and implications of these intersections always need to be considered when producing gender statistics. Women and men are not homogenous groups. There are significant differences between women and between men depending on age, education, and other significant categories. It is important to be careful about generalizations about women or men that might be misleading because of this diversity. There are also important gender differences associated with ethnicity, religion, disability and sexual orientation, as well as with migration and citizenship status. Further distinctions may be based on urban/rural residence.

In some instances these intersections may simply lead to one form of disadvantage being added to another, while in other cases, there may be a multiplicative effect. Women in some population groups can face discriminatory behaviour due to differing gender roles in their own community. For example, as shown in a study carried out by the United Nations Development Programme (UNDP) in nine countries in South-East Europe in 2004, non-Roma persons are five times more likely to reach secondary education as Roma people. However, the percentage of Roma men who achieve secondary education is double the percentage of women. Among non-Roma people, the gender difference is less marked (UNDP 2006). Roma women are subject to a double disadvantage, both as women *and* as members of a minority group. It is therefore important,

wherever possible, to gather and present data disaggregated not only by sex but also by other social dimensions in order to assess the different situations.

1.4 Gender statistics topics

The areas covered by gender statistics are not confined to the family, or any one area, but span a wide range of concerns in every country. There are various ways to identify and classify critical gender concerns. The European Union's roadmap for equality between women and men (European Commission, 2006a)[2] and the United Nations Platform for Action (United Nations, 1995a)[3] provided two such approaches.

The European Union's roadmap outlined six priority areas for action on gender equality for the period 2006-2010:

- equal economic independence for women and men
- reconciliation of private and professional life
- equal representation in decision-making
- eradication of all forms of gender-based violence
- elimination of gender stereotypes
- promotion of gender equality outside the Union.

For each area, it identified priority objectives and actions, and presented indicators used by the European Commission to monitor progress towards gender equality in the policy areas identified in the Roadmap. It recognized that in some areas, statistics and indicators need to be further developed, such as concerning the gender dimension in health, or on crime and victims.

The 1995 United Nations Beijing Platform for Action identified 12 critical areas of concern calling for strategic actions. In turn, these gender concerns identified what statistics will need to be collected to provide a basis for policies and programmes and for their monitoring and evaluation. The listing below uses the phrasing of the "Platform" to establish why an area is a critical concern and presents selected research findings to describe briefly some gender issues each involves.

1. ***Poverty****: 'The persistent and increasing burden of poverty on women'*: Poverty among women may be linked to policies on macroeconomics, welfare and credit that do not take sufficient account of the position of women. Poverty may be understood at the individual level of men and women as well as that of the household. Women may have different routes into poverty than men, such as widowhood and lone motherhood.
2. ***Education and training****: 'Inequalities and inadequacies in and unequal access to education and training'*: In some countries, girls and women may have less access to education and training as compared with boys and men; there is often sex segregation so that women and men are typically found in different branches of education and training, which may lead to better or worse rewarded employment; life-long learning is typically more important to women than men, because women are more likely to want to return to education and employment in adulthood after periods of dedicated intensive childcare, but this may be changing as men lose jobs and need to qualify for new types of employment.
3. ***Health****: 'Inequalities and inadequacies in and unequal access to health care and related services'*: In some countries, women may have less access to health care than men; some forms of health care concern women specifically, such as at the time of childbirth, or in their access to specific forms of reproductive health care; some diseases are specific to different sexes e.g. breast cancer, prostate cancer.
4. ***Violence****: 'Violence against women'*: Gender –based violence is predominantly from men to women, including domestic violence, sexual violence, stalking, sexual harassment at work, female genital mutilation, trafficking of women into prostitution, forced marriage, and traditional and honour-based violence. Violence against women is both cause and consequence of gender inequality.
5. ***Armed conflict****: 'The effects of armed or other kinds of conflict on women, including those living under foreign occupation'*: Women are typically less involved than men in decision-making about conflict resolution; women can be particularly vulnerable to sexual violence in conflict and post-conflict situations.

[2] http://ec.europa.eu/social/main.jsp?catId=422&langId=en

[3] http://www.un.org/womenwatch/daw/beijing/platform/plat1.htm

6. ***Economy**: 'Inequality in economic structures and policies, in all forms of productive activities and in access to resources'*: analysis of the economy often pays less attention to the forms of work in which women as compared to men are involved, for example, unpaid domestic work as compared with paid work; there are important distinctions between forms of work organisation that are of particular relevance to a gender analysis, such as the distinction between full-time and part-time employment; occupational and industrial segregation by sex, the intricacies of combining caring and employment, discriminatory practices, and the gender pay gap.
7. ***Power and decision making**: 'Inequality between men and women in the sharing of power and decision-making at all levels'*: Gender issues include the proportion of women elected to Parliament, the proportion of women appointed as government ministers, the proportion of women in senior positions in the police, judiciary and other public bodies, the proportion of women on the boards of major companies, as well as the nature of the outcomes of political processes.
8. ***Institutional mechanisms for the advancement of women**: 'Insufficient mechanisms at all levels to promote the advancement of women'*: This is a topic of specific relevance to gender relations; it concerns the existence, resources and capacity of the institutional machinery to advance women, including government ministries and programmes, and the development of an evidence base to evaluate policy, such as gender disaggregated statistics.
9. ***Human rights of women**: 'Lack of respect for and inadequate promotion and protection of the human rights of women'*: While all human rights are women's rights, some instruments have been developed that are focused on women, such as the United Nations Convention on the Elimination of Discrimination against Women (CEDAW). The concept of human rights has been particularly important in developing analysis of the policies needed to eliminate violence against women, which is conceptualised as a violation of women's human rights.
10. ***Media**: 'Stereotyping of women and inequality in women's access to and participation in all communication systems, especially in the media'*: Gender issues in the analysis of the media include the extent of the participation of women in decision-making in the media, as well as the nature of the representations of women in the media, such as whether these are stereotypical rather than balanced.
11. ***Environment:** 'Gender inequalities in the management of natural resources and in the safeguarding of the environment'*: Gender issues include the participation of women in decision making about the environment, as well as differential impacts and implications of environmental problems for women and men.
12. ***The girl child**: 'Persistent discrimination against and violation of the rights of the girl child'*: Girls in some countries have less access to nutrition, health care and education than boys. They may be subject to paedophilia, forced prostitution, female genital mutilation, early marriage, female infanticide and prenatal sex selection.

Even this extensive list is not fully comprehensive. Others areas where gender analysis is important include transport, sport and leisure, reproduction, and sexuality.

1.5 Making gender visible in statistics

The process of identifying gender and gender relevance is a complex and often subtle one. It requires an understanding of where gender might be relevant and which areas might contain dimensions that are significantly gendered. This requires an understanding of current policy issues. It also requires technical understanding of the conceptual frameworks and methods used in official statistics. Certain important frameworks and methods traditionally used in official statistics are biased against women or men and thus women's or men's activities and preferences are not fully covered in statistics. In addition, the concept of the household, the basis for much policy-oriented data analysis, assumes homogeneity of all household members.

One example of bias in statistical concepts is in the definition of what the term 'economic' refers to. The traditional approach to the economy focuses on the monetized sector that can be represented in measures such as Gross Domestic Product. This omits unpaid household service work from the analysis. To understand the full

provision of goods and services in a country, it is important to have comprehensive data on *all* kinds of work. In order to investigate these issues more fully, Time Use Surveys are being undertaken increasingly by national statistical offices to collect data on all forms of work (see section 3.4). The 2008 System of National Accounts (UNSD 2009a)[4] recognizes the need for separate measurement and recommends that valuation of production outside the boundaries set for the SNA be undertaken in satellite accounts.

In other areas, traditional concepts, such as family status, fertility preferences, contraceptive behaviour and actual fertility, are biased against men, in the sense that more information is collected on women in these areas. However, Sweden is one of several countries that collect and publish data on family status, contraceptive practices and fertility for both men and women.

A second type of problem occurs when the basic unit of analysis and presentation is the household, as for example in the traditional approach to poverty and social exclusion. This approach is often justified by the assumption that within the household there is an equitable pooling of resources. The assumption that the household is the appropriate unit is carried into certain public policies that tax and provide benefits to the household as a unit. However, use of the household as the unit in poverty analysis obscures gender inequalities in the distribution of resources within the household, and the implications of differential work incentives for women and men. It is important to collect data on income and resources at the level of individual men and women, as well as the level of the household unit, and to provide tabulations and analysis, which show both household and individual patterns.

Another way the household concept has made women invisible in statistics is the use of "head of household." Often the characteristics of the entire household have been identified as those of the head, and the head has been assumed the oldest man in the household. This practice obscures a series of gender issues. For example, comparing 'heads of households' may well not be a comparison between male earners: the highest earning of a two-earner household may be the woman; the woman may be the main earner and the man the main carer; the household may be made up of a lesbian or homosexual couple. Using the concept of the 'household reference person' (see Box 3.2) allows the advantages of a single point of enquiry, without the disadvantages of making false gender assumptions.

The process of making gender visible in areas where it was previously thought not relevant lies at the heart of the development of gender statistics. Rather than making assumptions about the nature and significance of gender relations, such issues are opened up to analytic scrutiny. There are many questionable assumptions in traditional analysis. These include: assuming that gender is not relevant because other social and economic dynamics are more important; that women's interests are always closely aligned with those of their husbands; and that a particular category of person is always male or female. The development of gender statistics creates the evidence base that enables such assumptions to be tested, and better analysis and policies can then be developed.

1.6 Gender equality

In many cases, the interest in examining the differences and similarities between women and men is aimed at understanding the nature and causes of gender inequality. Many contemporary policies are designed to reduce the level of gender inequality and statistics are needed to measure progress. However, the concept of gender equality is complex.

The definition of gender equality depends on the understanding of gender differences. Are all differences also inequalities? Or are some differences valued and not a sign of inequality? Does reaching gender equality mean changing the position of women, or does it mean a much deeper transformation that includes changing the lives of men as well? These different approaches to gender equality may be summarized in a three-fold typology. Gender analysis based on relevant statistics may indicate which approaches may be most appropriate to different areas of concern.

The interconnection between gender policies and wider social issues is recognized prominently in the United Nations Platform for Action (UN 1995a):

[4] See http://unstats.un.org/unsd/nationalaccount/SNA2008.pdf

para. 41. *'The advancement of women and the achievement of equality between women and men are a matter of human rights and a condition for social justice and should not be seen in isolation as a women's issue. They are the only way to build a sustainable, just and developed society. Empowerment of women and equality between women and men are prerequisites for achieving political, social, economic, cultural and environmental security among all peoples.'*

First, *equality means a single standard of evaluation*, with the implication that unless there is sameness there is not equality. An example is that of equal pay for work of equal value. This approach is the most widespread and underpins most legal treatments of gender equality, which are based on the principle of equal treatment. It is the simplest and best understood meaning of the concept of gender equality. An example of an indicator used to measure this concept of gender equality is the gender pay gap (see section 4.1.3).

In a second approach, *there is equal valuation of different contributions*, with the implication that there is not a simple single standard against which men's and women's positions are assessed. An example is that of unpaid care work, and whether (and if so, how) this might be treated as equivalent to paid work. Time Use Surveys (see section 3.4) are invaluable in showing how much time women and men spend on paid and unpaid work. Should national accounts attempt to place a monetary value on unpaid care work in order to value it equally with paid work? This approach may lead to policies that involve special treatment for women, such as paid maternity leave. However, it is also argued that there is a danger that this approach may be used as a justification of the status quo rather than equality. Can different ever mean equal? Hence, while not an uncommon approach, this is a much disputed interpretation of the meaning of gender equality.

According to a third a position, *equality between men and women will only be achieved through the transformation of the practices and standards of both men and women*. An example is that of changing the structural conditions so that gender equality may be achieved, such as reconciling work and family life by making the workplace compatible with care (again data from Time Use Surveys may provide useful insights); or by changing gender power relations in order to reduce violence against women (see section 4.12).

This approach requires major structural changes throughout society. It is similar to the first interpretation of the concept of equality, in that equality is achieved through ultimately achieving sameness, but differs in positioning this within a wider analysis of the transformation of the social environment. This is the approach most usually adopted within the strategy of gender mainstreaming, which seeks to include the gender equality perspective in all areas of analysis and policy.

There are vigorous debates on these three positions among gender scholars and policy makers. It is not necessary to make a decision as to which one is best in order to produce statistics relevant to gender equality. Indeed to the contrary; the job of a gender statistician is to produce the evidence in order to facilitate the discussions that might achieve the resolution of these debates by others.

There are several further nuances on the concept of gender equality, including equal opportunities and equity.

Equal opportunity is an approach which focuses on issues of access of individuals to particular institutions and treatments. It is close to the notion of equal treatment. With its focus on justice for individuals, however, it is an approach that rarely addresses the wider issues about the institutions that structure our resources. It may be regarded as necessary but perhaps not sufficient for the development of gender equality.

The concept of *equity* is closer to the notion of fairness than to equality, in that it allows some inequalities to be regarded as legitimate.

For example, there may be gender pay equity rather than pay equality if there are gender pay differences that might be caused by differences in skills rather than by discrimination. Also, often unequal treatment between women and men is considered necessary to obtain equitable results.

Chapter 2
Why do we need gender statistics?

2.1 Introduction

As gender issues move forward in national and global agendas, new demands are created for statistics. Policy makers, researchers and advocates request additional data and argue, more generally, that the gender perspective should be a basic assumption guiding which data to collect and to analyze. In doing so, they are not only asking for data needed for the development of policies on gender equality but also their efforts encourage change and reform in statistical systems to make them produce more relevant information. The *"why"* of gender statistics is answered by both objectives. Gender statistics are needed to provide an evidence base for research and policy development. In addition, gender statistics have an important role in improving the whole statistical system, pushing it to describe more accurately and fully the activities and characteristics of the whole population, which is made of women and men.

2.2 Importance of gender statistics

Gender statistics are the basis for analysis to assess differences in the situations of women and men and how their conditions are changing or not. In this way, gender statistics raise consciousness and provide the impetus for public debate and change. Gender statistics are also required for research to support the development and testing of explanations and theories to understand better how gender operates in a society. All of these uses form the basis for developing policies to foster greater gender equality. Furthermore, gender statistics are needed to monitor and evaluate the effectiveness and efficiency of policy developments.

The policies, research questions and public debate, for which gender statistics are needed, focus on issues of gender equality and the advancement of women. In addition, gender statistics have uses in areas of policy where gender is not the leading issue. In many instances, social and economic policies are affected by gender dimensions even when it is not immediately obvious. In these cases, the availability of the evidence base to support gender analysis is important to the investigation, since without an understanding of the differences in the operation and effects of the policy on different population groups, such as on women and men, the full implications of the policy may not be understood and its objectives may not be fulfilled.

Underlying all of these uses for gender statistics is their role in improving statistical systems. It is important to have a dialogue between producers and users of gender statistics. For example, gender specialists bring their own demands for data and in doing so identify deficiencies in the data currently available to them. They push for improvements in the concepts, methods, topics and data series to reflect better the activities and contributions made by women as well as by men. While responding to the demands of data users, it is important that statisticians take into account stereotypes and social and cultural factors that might produce gender bias. The result of such efforts is often not simply better information on women and men, but improvements in measuring the realities of economic and social life.

In gender statistics, as in all official statistics, it is important to adhere to the Fundamental Principles of Official Statistics, adopted by the United Nations Statistical Commission in 1994. In particular, the Principles 1 Relevance, impartiality and equal access and 2 Professional standards and ethics underline the duty of official statistics to operate on an impartial and ethical basis and to decide according to strictly professional considerations on the methods for the collection, processing, storage and presentation of statistical data (UNSD 1994).

2.3 Gender statistics in the policy-making process

At the international level, a series of United Nations intergovernmental resolutions provide a mandate for the development of policies on the advancement of women and gender equality, as well as for the statistics required for the

development of these policies. These include the United Nations Convention on the Elimination of All Forms of Discrimination against Women[5] in 1979 and the Platform for Action of the Fourth World Conference on Women held in Beijing in 1995[6].

Gender equality is also a fundamental component of the Millennium Declaration (UN, 2000), adopted by all Member States of the United Nations in 2000[7] (See Box.2.1). The eight Millennium Development Goals (MDGs) provide a framework for measuring progress towards fulfilling the commitments of the Millennium Declaration. Goal 3 explicitly calls for gender equality and the empowerment of women, with the associated indicators relating to education, employment and decision-making. However, ensuring gender equality is essential for achieving all the other goals and countries are asked to provide sex-disaggregated data wherever applicable when reporting on progress[8].

Box 2.1. UN Millennium Development Goals

Goal 1	Eradicate extreme poverty and hunger
Goal 2	Achieve universal primary education
Goal 3	Promote gender equality and empower women
Goal 4	Reduce child mortality
Goal 5	Improve maternal health
Goal 6	Combat HIV/AIDS, malaria and other diseases
Goal 7	Ensure environmental sustainability
Goal 8	Develop a global partnership for development

Other international and supranational organisations have further developed mandates, for example, the European Union's 1997 Treaty of Amsterdam (European Parliament 1997)[9], legislation, such as Directives on the equal treatment of women and men in employment and in the delivery of goods and services and follow-up actions based on the recommendations from the Beijing Conference (European Commission (2000b). Many national governments have their own specific policy and legislative programs to achieve women's empowerment and gender equality.

The availability and accessibility of gender-sensitive data are instrumental to the development and implementation of policies that can facilitate the achievement of national and international objectives. The importance of using statistical evidence to develop appropriate policies is recognized in one of the strategic objectives of the Platform for Action of the Fourth World Conference on Women. The objective H.3 is: "*generate and disseminate gender-disaggregated data and information for planning and evaluation*" (United Nations, 1995a). It is followed by a detailed set of actions, in fact an agenda for development of statistics. Some actions address the general need for statistics: "*Ensure that statistics related to individuals are collected, compiled, analyzed and presented by sex and age and reflect problems, issues and questions related to women and men in society*." Other actions specify what needs to be done to develop statistics related to the specific topics of concern.

Gender statistics are also relevant for the development of policies that are not explicitly related to gender. Many policies that appear to have little to do with gender equality are actually affected in an indirect way by aspects of relationships between women and men. It is often necessary to investigate the gender aspect of a policy even if it is not directly articulated in a way that draws attention to this interaction. An example of the relevance of gender to policies that appear not to be relevant from a gender perspective is that of violent crime. The concept of 'violent crime' might appear to have little to do with gender. Yet, one of the hidden aspects of violent crime is violence in the home from husbands to wives. Omitting this part of violent crime would mean that a significant part of violent crime is not measured and therefore not considered in policies and programs. The inclusion of a gender perspective enables a more nuanced and multi-faceted policy to be developed; one that is likely to be more successful.

Policy-makers represent strategic users of statistical data (the very name 'statistics' is inherently linked to state activities). There are certain steps in the 'Statistical production process' (see section 3.2) where data producers should interact quite

[5] http://www.un.org/womenwatch/daw/cedaw/cedaw.htm
[6] http://www.un.org/womenwatch/daw/beijing/platform/plat1.htm
[7] http://www.un.org/millennium/declaration/ares552e.htm

[8] See also http://mdgs.un.org/unsd/mdg/Resources/Static/Products/Progress2009/MDG_Report_2009_Progress_Chart_En.pdf

[9] http://eur-lex.europa.eu/en/treaties/dat/11997D/htm/11997D.html

closely with policy makers, in a process where role and responsibilities of both actors are clear and respected. Those steps are:

- ***Identification of gender issues in society:*** The process starts with the realization that a gender issue exists in society on which greater knowledge is needed. The gender issue could relate to a particular key policy issue in the country, such as poverty, and the realization that the gender aspects of poverty are not well understood. Alternatively, there could be an explicit gender issue, such as gender-based violence, on which policy makers realize they need more information.
- ***Production of gender statistics****:* After an issue has been identified, the next step involves production of statistics to measure it. This might involve the introduction of a completely new instrument, such as a survey on gender-based violence. Alternatively, it could involve an enhancement of existing data collection, through the addition of one or more questions in a survey or administrative form, expansion of response options to a question or administrative form, or changes in the way that questions are asked to make them less gender-biased. Yet another possibility is changes in the recruitment and training of data collectors, to ensure they are aware of the interrelationship between the relevant gender issues and their role in the interview process.
- ***Marketing and dissemination of gender statistics:*** Presentation of the enhanced statistics is not enough. In order to be used, they need to reach the policy makers (both civil servants and elected representatives) and those who advise them. They also need to reach the advocates, such as women's groups, who can put pressure on the policy makers for the necessary changes. Finally, the statistics need to reach those who have influence in the policy arena but who would normally not recognize gender issues. Different products, different marketing strategies and different dissemination techniques may be needed for each audience.
- ***Gender and policy analysis:*** Generally, national statistical agencies are tasked with producing statistics and are not expected to analyze them from a policy perspective. Indeed, in many countries there is an explicit requirement that the national statistical office should not make policy statements. Instead, they are meant simply to present the 'facts'. The situation might be different for data producers in some other parts of the national statistical system, such as the education or health ministries. However, those responsible for policy analysis and proposals will usually differ from those responsible for the production and publication of statistics. Therefore, gender and policy analysis often involves actors outside the national statistical service, who analyze the meaning and implications of the statistics. While national statisticians are not directly responsible for this step, they need to be aware that the way they present statistics can influence the analysis.
- ***Use of gender analysis for policy actions:*** From a gender perspective, the hope is that policies will promote movement towards gender equality. It would, of course, be naïve to assume that policy is often based mainly on facts and figures. Many different forces influence policy. However, the existence of reliable facts and figures strengthens the hand of any policy proponent. It also promotes the development of 'evidence-based' policy, rather than policy that is driven by supposition or ideology. Further, it promotes sensible debate among policy makers on the different options.
- ***Identification of gaps and formulation of new questions:*** Ideally, governments should be monitoring policy implementation in respect of both outputs (deliverables) and outcomes (impact on the society). Other actors might be monitoring the impact of policies seen to have potential to address gender issues. For example, an organization working in the area of women's health might monitor the impact of a new policy approach in respect of contraception, while an NGO providing services for battered women might monitor the impact of the introduction of interdicts, such as removing a violent partner from the family home. This monitoring process might lead back to the beginning of the chain by establishing that there are areas where knowledge is lacking.

The above description is very general. The process will differ from country to country and from topic to topic. It will depend on which actors in the national statistical office are responsible for a particular issue. For example, it is likely to differ if the statistics concerned are produced by the

statistical office or by a line agency. It will depend, also, on the level and breadth of awareness of a particular gender issue, and the degree to which the issue is politically or otherwise sensitive. It will also depend on the approach of government, and the extent to which it prides itself on producing evidence-based policy, as well as on its commitment to gender equality. In some cases, the process of asking for statistics that enhance gender knowledge might be instigated by someone who opposes change, and is asking for more evidence as a delaying tactic.

2.4 Gender statistics to inform general public

In parallel to informing policy-makers, the role of the NSO is to inform other actors that the new data exists and is readily available. Researchers, analysts, NGOs and the media represent fundamental data users, who will contribute, in different ways, to informing the general public about the respective roles of women and men in society.

2.5 Gender statistics to improve national statistical systems

Gender statistics aspire to reflect reality in a more accurate way. One aim of gender statistics is to go beyond appearance and stereotypes, so that the invisible line between men and women is drawn and differences are made clear. In order to better describe reality and avoid unwanted biases, statisticians are continuously pushed to improve definitions and data collection methods.

Box 2.2 on developing statistics on employment in India describes how the efforts of advocates to improve data on poor working women resulted in better data not only on these women, but also on most employed women and men in India.

In the process of making official statistics more gender-sensitive, national statistical offices have the possibility to improve by:

- starting new data collections (for example surveys on time use or on violence against women)
- reviewing definitions
- improving data collection (wording of questions, sample designs, interviewer effect)
- improving presentation and dissemination of results.

Box 2.2: Developing statistics on employment in India

Since the mid-1980s, the Self Employed Women's Association of India (SEWA) has worked tirelessly to promote the development of the Government of India's statistics on informal employment. SEWA- particularly its founder Ela Bhatt and its national coordinator Renana Jhabvala - recognized the power of statistics to advocate the cause of its workers and to inform policies and programs to improve their situation. As Ela Bhatt put it: "…the employers used to say: 'Who are homeworkers? How many are there? Where are they? They are not there.' And they used to make fun of us – to ridicule us". SEWA recognized that by collecting data on specific categories of homeworkers - bidi rollers and then incense workers – they were able to convince authorities of the importance of these workers and to negotiate their coverage by welfare funds. SEWA also used statistics to support passage of the 1996 ILO Homework Convention and to stimulate efforts in India and more broadly in Southeast Asia to improve the conditions of home-workers. The results of these efforts also included the overall improvement in national labour force data.

SEWA has not restricted itself to small research studies but has taken an active role in shaping national statistical policy. It has lobbied the Government of India to set up commissions to study the problems of self-employed women, participated actively in the commissions once formed, collaborated with partners to do research studies, participated in the planning of surveys, and followed carefully decisions on data collection efforts that related to their members. These efforts have secured improvements in the livelihood of low-income workers. Another result which is important to the field of statistics is that India is now a leading country in the development of statistics on informal employment. This achievement owes a lot to the close collaboration of the national statistical services with groups such as SEWA. The impact of these efforts on statistics goes beyond improving data on women in informal employment. As over 90 per cent of the country's workers are in informal employment, a result has been the improvement of data on the total labour force.

Chapter 3
How to produce gender statistics: general issues

3.1 Introduction

This chapter examines the main measurement issues from the perspective of deriving reliable, gender-relevant information. It presents the key phases of a statistical production process, describing how gender bias can be avoided at each phase. It then goes on to discuss the wide range of data sources that can be used to produce gender statistics within a national statistical system. These sources are grouped into four broad types of national data collection: population censuses; population-based sample surveys; business surveys; and administrative records. Time use surveys are given particular attention in this chapter and are described separately from other types of population-based surveys as they provide a wealth of information for analyzing many important gender issues.

3.2 Statistical production process

3.2.1 Overview

Overall design

The process of producing gender statistics, like other statistics, involves a range of highly inter-related activities. Each of these activities, and the way they are linked together, can have a significant impact on the quality of the final product. It is therefore important to view the process holistically – from an end to end perspective – to ensure that all the activities are linked efficiently and seamlessly and that they form a well-integrated package. Clearly defined objectives and sound measurement practices should drive the overall design of the process.

Key steps

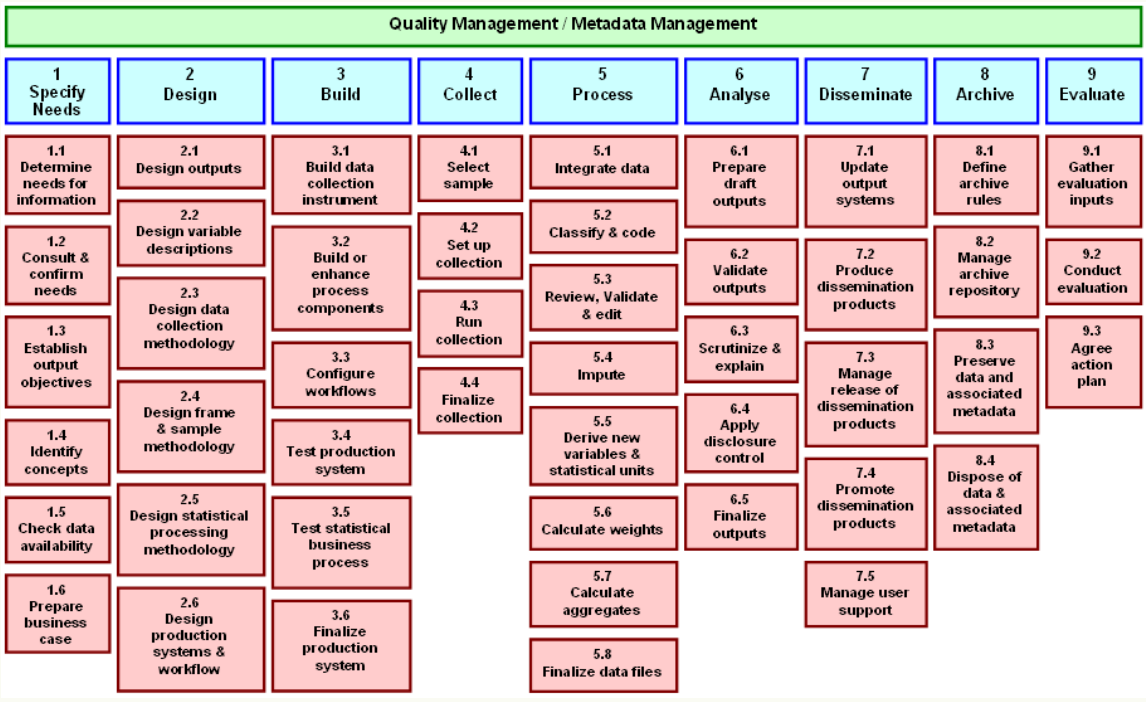
In broad terms, the process of producing gender statistics is similar to that for other fields of statistics. It typically involves a number of key steps (UNECE, 2008a, and Hedman et al., 1996), which we will look at more in detail in the following sections:

- selection of topics that need to be investigated
- identification of the *data needed* to understand gender differentials and women's and men's roles and contributions in the different spheres of life
- evaluation of existing *concepts*, *definitions*, and methods to produce unbiased gender-relevant information
- development of new concepts, definitions, and methods where necessary that adequately reflect the diversities of women and men in society
- development of the data collection instrument: choice of *unit of enumeration* about which to collect information; *survey design*, such as definition of sample size, questionnaire development and testing; *training of enumerators*, ensuring all will use a standard approach in data collection and avoid sources of gender bias
- *collection and processing* of data using practices that will deliver reliable results
- *analysis and presentation* of statistics in easy-to-use formats; *dissemination* of statistical products to a wide range of users including policymakers and planners.

How these steps are operationalized in the context of an individual country's national statistical system will vary depending on the purposes for which the gender statistics are required. However, producing gender statistics often means to adopt a gender perspective in data collections that have other main goals. Therefore, the process described above needs to be made gender-relevant, so that in every step, stereotypes and social and cultural factors that might produce gender-based biases is taken into account. Furthermore, the activities undertaken will vary depending on whether the data source is a statistical survey collecting data directly from the people or businesses concerned, a sample survey or a census, or an administrative system where statistics are not the primary purpose of the system. The steps that have been identified fit well in the case of sample surveys, but we will look at the constraints faced by other sources later on, especially administrative surveys, in the sections dealing specifically with each type of source. A useful generic reference model for the production of statistical data is being developed

Box 3.1: Generic Statistical Business Process Model (Version 4.0)

Phases and sub-processes of the Generic Statistical Business Process Model (GSBPM)



The "Generic Statistical Business Process Model" (GSBPM) was developed by the joint UNECE /Eurostat/OECD working group on Statistical Metadata (METIS). It builds on models developed by Statistics New Zealand and others. The model was initially developed to provide standard terminology when statistical organizations are discussing the production of statistics.

It also provides a framework for process quality assessment within statistical organizations. It is intended to be relevant to all statistical production activities regardless of data sources (surveys, administrative records, data integration etc.). The model should not be seen as a rigid framework, to be followed step-by-step, but as a flexible tool to describe and define

the set of business processes needed to produce official statistics. The model encompasses nine phases of the statistical business process, each broken down into a number of sub-processes, as well as two over-arching processes: quality management and metadata management. For more information, see www.unece.org/stats/gsbpm.

jointly by the United Nations Economic Commission for Europe, Eurostat and OECD (see Box 3.1).

Assuring data quality

As data are the main product of a national statistical organization, data quality is of central concern. At the time of writing, the United Nations Statistical Division is in the process of developing a generic national quality assurance framework for official statistics (UNSD, 2010). Other international quality frameworks for statistics include the International Monetary Fund's *Data Quality Assessment Framework*[10] and the Organization for Co-operation and Development's *Quality Framework and Guidelines for OECD Statistical Activities* (OECD, 2003a). Linked with the European Statistics Code of Practice, Eurostat has published *ESS Standard for quality reports* that includes templates for summarising the quality of statistical outputs (Eurostat, 2009)[11].

[10] http://dsbb.imf.org/Applications/web/dqrs/dqrsdqaf/

[11] http://epp.eurostat.ec.europa.eu/portal/page/portal/ver-1/quality/documents/ESQR_FINAL.pdf

Quality assurance frameworks define what is meant by data quality and how it can be achieved. Quality is defined in terms of meeting user needs, and therefore has several components. For example, the UNECE Quality Framework identifies the following seven components of statistical data quality:

1. **Relevance:** The degree to which statistics meet the needs of users. Relevance therefore refers to whether the statistics that are needed are produced, and whether the statistics that are produced are needed. It also covers methodological soundness, and particularly the extent to which the concepts used (definitions, classifications etc.) reflect user needs.
2. **Accuracy:** The closeness of statistical estimates to true values, with the proviso that absolute accuracy can be difficult to determine.
3. **Timeliness:** The length of time between data being made available and the event or phenomenon they describe.
4. **Punctuality:** Punctuality refers to the time lag between the release date of data and the target date when they should have been released.
5. **Accessibility**: The physical conditions in which users can obtain data: where to go, how to order, delivery time, clear pricing policy, convenient marketing conditions (copyright, etc.), availability of micro or macro data, various formats (paper, files, CD-ROM, Internet…), etc.
6. **Clarity:** Clarity refers to whether data are accompanied by sufficient and appropriate metadata, whether illustrations such as graphs and maps add value to the presentation of the data, and whether information on data quality is available.
7. **Comparability**: The extent to which differences between statistics are attributed to differences between the true values of the statistical characteristic, or to methodological differences. Comparability includes:

   - Comparability over time – the extent to which data from different points in time can be compared.
   - Comparability through space – the extent to which data from different countries and/or regions can be compared. The provision and application of international standards is particularly important here.
   - Comparability between domains – The extent to which data from different statistical domains can be compared.

The notion of "cost-efficiency" should also be mentioned. Whilst this is not considered a component of quality, it is a factor that must be taken into account in any analysis of quality. If a product can be produced more efficiently with the same quality, then resources released can be used to improve the quality of that product or other products.

Other components of quality can be identified at the level of the organisation, rather than at the level of the individual data sets. These include the concepts of professionalism, integrity, credibility, and legal and organisational environments.

Each of these interrelated dimensions should be managed to ensure the gender statistics produced are of high quality.

Avoiding gender bias

There are various types of measurement error that can be introduced at any step in the statistical process. Gender bias is one type of error of particular concern for gender statistics as it can seriously undermine the reliability of the data. Possible sources of such bias need to be identified and addressed.

The following sections discuss gender bias in more detail, as well as other measurement issues that need to be considered during the process of producing gender statistics following the key steps identified above. The final step, dissemination is discussed in Chapter 5. These sections suggest how parts of the process can be improved to avoid gender bias and maximize the usefulness of the statistical output.

3.2.2 Evaluation of data needs and sources

To determine what gender statistics should be produced and the priority that should be given to such work, the gender issues in a country and the policy goals and plans relating to these issues need to be understood by statistical producers. This requires ongoing engagement with relevant policy agencies, researchers and other potential users of the statistics as well as effective consultation with them throughout the statistical production process.

Once the data needs have been identified, statistical producers need to evaluate existing sources in order to assess the extent to which these sources meet those needs and to keep response burden to a minimum. Some of the data may be periodically collected by the national statistical system; some data may be available but they may not adequately reflect gender differences or they may contain biases; and some data may not be collected at all. This scrutiny of available data may reveal gaps that can be addressed by modifying concepts, definitions or methods used in existing collections. In other cases, a new collection activity may be required. For example, gaps have been identified in the measurement of the reconciliation between work and family life. Eurostat responded by introducing a special module on this aspect in the 2005 Labour Force Survey.

Workshops, seminars and user advisory groups can be valuable mechanisms for exploring the need for gender-relevant information, sharing experiences concerning the usefulness of existing data, and developing ideas to address data gaps.

3.2.3 Concepts, definitions and classifications

Concepts and definitions

At the core of any collection are the concepts to be measured and the definitions relating to these concepts. For purposes of producing gender statistics and analyzing gender concerns, the concepts and definitions must be appropriate for gauging the experiences of both women and men and for understanding differences in their economic and social circumstances.

While conventional concepts may be well-suited to certain types of analysis, they may have shortcomings for gender studies. In such cases, consideration should be given to the feasibility of developing supplementary measures based on alternative or extended concepts that offer richer gender insights.

For example, measures of employment based on conventional labour force definitions may be key indicators of economic activity in a country, but provide only partial information about gender contributions to economic production in its broadest sense because large amounts of unpaid work are excluded. In many countries, broader measures of work are produced periodically by collecting more comprehensive data covering both paid and unpaid productive activities. Such data can be obtained in various ways, such as through supplementary question modules attached to Labour Force Surveys or through Time Use Surveys.

What concepts are measured, using what collection instrument and how accurately, ultimately depends on the national survey programme, the resources at its disposal, and the user priorities that drive it in each country. More accurate measures of some gender-relevant concepts may be possible from household sample surveys than from Population Censuses in some countries, because more effort can be given to interviewer training on gender issues and more questionnaire content can be devoted to obtaining the details required for definitional precision.

Standard frameworks

In the planning stage of a collection, the data items to be obtained should be clearly defined according to the relevant standards and classifications. The use of standard frameworks for collecting and presenting the data enhances their usefulness and comparability. For example, in surveys of businesses and households, information about female and male employees may need to be classified by industry, occupation or region. If this is done using standard classifications, the information can be compared over time and across collections.

By making use of standard concepts and data items, it may also be possible to integrate data from different sources and organizations. Some standards have been developed with this as a key objective. This integration can improve the comparability and relevance of the data and reduce duplication of data collection. It is particularly important for gender statistics reports and analysis, where data may cover a wide range of topics and be drawn from many different sources.

International standards and guidelines

There are a wide range of international standards and guidelines that are relevant to the production of gender statistics. These can help to improve the conceptual base, design and implementation of collections as well as the international comparability of results. They cover aspects such as definitions and classifications, data collection methods, question modules, estimation techniques, etc.

For example, internationally agreed concepts and definitions have been elaborated by experts in a range of fields – including national accounts,

employment, demography, health, education, household income and expenditure. Similarly, international classifications are maintained in many fields, including: industry; occupation; diseases and related health problems; functioning, disability and health; level and field of education; status in employment; and countries and geographic areas. Some examples are the International Classification of Activities for Time-use Statistics (ICATUS), the International Standard Classification of Occupations (ISCO), the International Standard Industrial Classification (ISIC) and its European counterpart the Statistical Classification of Economic Activities in the European Community (NACE), the International Standard Classification of Education (ISCED), the International Classification of Diseases (ICD), the Nomenclature of Territorial Units for Statistics (NUTS)[12].

International bodies have also provided specific guidance for the 2010 round of Population Censuses and agricultural censuses and this guidance has implications for gender statistics from these sources. In the case of Population Censuses, the Conference of European Statisticians recommendations for the 2010 round include definitions and classifications associated with core concepts such as household, family, current activity status, etc. (UNECE 2006b). The United Nations Statistics Division published *Principles and Recommendations for Population and Housing Censuses*, Revision 2, in 2008, tailored more to the needs of developing countries. In the case of agricultural censuses, the FAO has recommended gender-sensitive definitions of a number of important agricultural concepts (e.g. holding, sub-holding, holder, sub-holder) (FAO 2005 and FAO 2007).

Much of the international effort in recent years to improve the quality and coverage of statistics from a gender perspective is reflected in the recommendations in these standards and guidelines, or in other international initiatives that are underway. The United Nations, in its report *The World's Women 2005: Progress in Statistics*, refers to many of these developments but also identifies many areas where concepts and methods need further improvement (UN 2006a).

[12] See *http://ec.europa.eu/eurostat/ramon/nomenclatures/index.cfm?TargetUrl=LST_NOM& StrGroupCode=CLASSIFIC&StrLanguageCode=EN* for a list of international statistical classifications and nomenclatures with relevant details.

3.2.4 Unit of enumeration

Types of unit

There are two types of units which need to be clearly defined early in the statistical production process. The *unit of enumeration* refers to the units in the population about which information is to be collected. These units refer to physical entities such as people, households, businesses, agricultural holdings, schools, hospitals, etc. *Units of analysis* refer to the units about which statistics are to be produced. They determine the data items to be collected and may refer to physical entities or to events such as births, hospital separations, economic transactions, etc.

Household and person level units

The unit of enumeration varies depending on the data source from which the statistics are to be derived. There can be particular complexities when the source is a Population Census or household survey, as there are generally two levels of unit used: a household-level unit and a person-level unit. Both levels of unit are important for gender statistics and the data collected at each level are generally used in combination.

Information collected on household questionnaires typically identifies all the members of a household and the relationships between them. This information is provided by a household reference person and is essential for distinguishing household and family types and for determining their composition. The questionnaire also usually obtains a limited amount of data about each member's demographic and other personal characteristics (e.g. age, sex, marital status, country of birth, etc.) and about the household dwelling. On the other hand, personal questionnaires focus on a particular individual and their specific circumstances, allowing many more topics to be explored in detail.

When the information from both questionnaires is brought together, it can provide insights into topics such as the living conditions of women and men, their family circumstances and the type of environment in which children are growing up. For example, the data can be used to identify households with low economic resources and these households can then be examined by household or family type. The data can also be used in examining issues such as: differences in the employment arrangements of lone mothers and partnered mothers; differences in the earnings of male and female partners in couple households with or without dependent children; and trends over time in the proportion of total income of

couples attributable to the female partners' personal income.

Unit issues relevant to gender statistics

The unit for which data is collected affects the type of measures that can be produced and the type of analysis that can be undertaken. In the case of person-level data, particular care is needed in analyzing the personal income, expenditure and wealth of women and men as some sharing of resources normally occurs between members of the same household and the nature of this sharing is affected by differences in household size and composition. For this reason, analysis of the distribution of resources is often based on measures of household income, expenditure and wealth adjusted or *equivalized* to take account of differences in household size and composition. In the case of household-level data, problems can arise if collection instruments use the concept of 'head of household' or if they obtain insufficient information to describe adequately the range of relationships that exist between household members. Deficiencies in the collection of relationship data can adversely affect the identification of different types of households and families, as well as the derivation of household and family status for individual members. These issues and ways of handling them are further discussed in Box 3.2 below. Box 3.3 provides a country example, showing how Ireland improved its collection of relationship information in its 2006 Population Census.

Box 3.2: Issues involved in household-level data collection instruments

Reference Person Approach

Many household instruments use the concept of 'household reference person'. The relationship of each household member to this person is recorded and the information is then used to derive household and family types of interest.

In the past, the 'head' of the household was generally used as the reference person and in some countries this is still the case. However, this concept of a household 'head' is no longer considered appropriate in many countries (UNECE 2006a). The concept is difficult to define, particularly when gender issues are considered, and has little relevance in many current household situations. This problem can be compounded if the concept is used but collection instruments and training do not indicate how the head is to be identified. In some cases a replacement concept called 'the householder' has been introduced, defined as the person in whose name the household dwelling is registered. This approach is more objective than household head and may relate in some ways to power relationships in the household.

Different forms of questioning are used by countries to capture relationship details, and various criteria and procedures are used to select the reference person. The criteria generally focus on selecting an adult member of the household that will facilitate the mapping of household structures. When carefully chosen, this approach can give accurate information for most household and family types. However, there are some cases, such as multiple family households or multi-generational households, where the approach will not always give the required result. Often it is the poorer and more marginalized households that tend to be bigger and have more extended shapes. Migrant households, too, often do not follow the 'standard' nuclear model. The 'household reference person' approach therefore involves a risk of some misunderstanding about the situation of those who are neediest.

Relationship Matrix approach

A more accurate method for mapping household structures is to use a matrix which asks for the relationship of each household member to every other member. This is the approach recommended by the Conference of European Statisticians (CES) for the 2010 Population Census (UNECE 2006b). The CES report observes that some countries have had good experience with using the matrix approach in their censuses, while others have noted problems with it due to its complicated character. For example, the matrix may take considerable time to complete, especially for larger households. For countries where the matrix approach is not feasible, the CES recommends that the 'household reference person' approach be used and it provides some guidance on how this person might be selected.

Comparison of Household Types

The reference person approach is also sometimes used in comparisons of households. For example, analysis might be done to compare households where the reference persons are female with those where they are male, or where they are more or less educated, in different occupations, or belong to different age groups. There are many problems with this type of comparison. Some relate to the conceptual problem of identifying and defining the reference person. Others relate to the assumption of homogeneity – that the situation of the reference person will be reflected in some way in the situation of other household members.

Analysis that uses the 'household reference person' concept in this way confuses a tool to facilitate data collection with an idea that has socio-economic meaning. Analysts may assume the person is the main breadwinner, or the main decision-maker. In reality, who is selected as the reference person may more often be a function of status within the household and society determined by other factors such as sex and age. In some cases, a largely absent member may be named as the reference person. Comparisons of households on the basis of such variably-defined entities may be virtually meaningless.

Households can be categorized in much more useful ways than by the sex of the household head or reference person. For example, the CES recommendations for the 2010 Population Censuses classify them into one-person households and multi-person households (UNECE 2006b). These households can be further dissected in various ways to indicate their composition and gender characteristics (e.g. single female or male household, lone mother or father household, couple household with or without children, jobless households, one or dual income earner households, etc). Of particular importance from a gender perspective is distinguishing between households where children are present and those where they are not.

Box 3.3: Improving the collection of household relationship data in Ireland's Population Census

In the 2002 Census of Population in Ireland, people were asked, "What is your relationship to Person 1". The options given were husband or wife, partner, son or daughter, mother or father, son-in-law or daughter-in-law, mother-in-law or father-in-law and other (write in). This approach failed to capture fully certain data such as relationships between different generations of the family. For example, the parents of a grandchild might not be identified.

For the 2006 Census, the Central Statistics Office (CSO) redeveloped the question to capture inter-relationships between people and they expanded the list of explicit options. The improved approach is shown in the following extract from the 2006 questionnaire. Each additional person in the household was asked about his /her relationship with *all* the other members of the household interviewed previously.

Person 5: Tick how Person 5 is related to Persons 1, 2, 3 and 4.

3 What is your relationship to Persons 1, 2, 3 and 4?
See example on back page.
✓ *one box only for each person*

Relationship of PERSON 5 to		Persons 1	2	3	4
Husband or wife	1				
Partner	2				
Son or daughter	3				
Step-child	4				
Brother or sister	5				
Mother or father	6				
Step-mother/-father	7				
Son-/daughter-in-law	8				
Grandchild	9				
Other related	10				
Unrelated (including foster child)	11				

Tick 1 box in the 1st column to describe how **Person 5 is related to Person 1.**

Then, tick 1 box in the 2nd column to describe how **Person 5 is related to Person 2.**

Then, tick 1 box in the 3rd column to describe how **Person 5 is related to Person 3.**

Then, tick 1 box in the 4th column to describe how **Person 5 is related to Person 4.**

Source: CSO 2006a

3.2.5. Survey design and content

Role of objectives in survey design

Measurement objectives should underpin all aspects of survey and questionnaire design. The main objectives may be to obtain national data on particular topics with a number of key dissections, such as gender, age and type of geography (e.g. urban, rural, remote etc). These aims then determine the sample design, including its size and geographic distribution. If a sample survey is to produce reliable data on females and males at some level of detail, or to provide measures for subgroups within gender groups (such as race or ethnic groups), the design must ensure that the sample is adequate to produce results within acceptable confidence ranges in the data cells of interest. For example, one of the goals of a survey on violence against women might be to evaluate the use of victims' services. The developers must determine how many cases they might expect to obtain in order to estimate the overall number of sample cases required for the survey (UNECE-UNODC 2008). Also, it may be possible to over-sample subpopulations of interest to reduce overall costs and still achieve the survey's goals.

Questionnaire design and content

The questionnaire has a major influence on the quality of the statistics produced from a collection. If it is not carefully and appropriately designed, it can adversely affect the answers and give rise to errors. Defining estimation goals early and clearly can help prevent development of questionnaires that do not meet users' data needs. Developing table shells (examples of tables to be produced, with column and row headings but empty of data) and/or multivariate models prior to development of a questionnaire can also illuminate potential problems at an early stage.

Incorporating a gender perspective into questionnaire design involves consideration of a number of factors, including:

- the data items required to meet the objectives of the collection
- the concepts and definitions associated with these data items
- the conversion of these data items into questions
- the formulation and wording of questions
- the order and sequencing of questions.

This process may lead to some refinement of the concepts and definitions, some reformulation of questions, or some re-orientation of methods and procedures to make them more gender-sensitive. In some cases, additional questions may be needed because modifying the existing ones would undermine data continuity and compromise comparison over time. In all cases, the benefits of new or modified questions should be weighed up against the costs, including the costs of making questionnaires too long or repetitive.

User advisory groups can be useful in determining the design and data item content of survey questionnaires. Such groups can help to clarify the concepts to be measured, and assist in overcoming resistance that may emerge when measuring certain issues, including those that are important for gender analysis. Their advice on relative priorities for specific data items can be valuable in cases where content may need to be cut back to fit within survey budget constraints or to comply with respondent load commitments of the collecting agency. In establishing these groups, care should be taken to ensure that they include a range of different types of users, including persons sensitive to gender considerations. Members should also be knowledgeable about the kind of data that a particular survey can capture and the analytical uses to which the resulting statistics will be put.

In developing questionnaires, every possible attempt should be made to avoid the most common gender biases. Typical causes of error are summarized in Box 3.4. Attention should also be given to the interaction between gender and other factors, such as cultural and educational background. These interactions can lead to bias through non-response (full or partial) to certain topics or forms of questioning. Questions should be clear to all respondents, so that no-one will be induced to interpret questions on the basis of their personal reference system. For example, in violence against women surveys, some respondents may not feel that what they have experienced was a crime, and they might not report an incident if the emphasis is on breaking the law. Rather than using such words, it is preferable to describe an event in terms of its elements: the use of force, the threat, weapon presence, physical contact, physical injury, loss of property, etc. (UNODC-UNECE 2008).

Box 3.4: Typical causes of gender bias in use of questionnaires

Inadequate definitions and concepts	Conventional definitions and concepts may fail to reflect accurately the gender differentiations common in the target population.
Erroneous wording of questions	The question, or series of questions needed to directly measure, or derive a measure, of a particular concept may be deficient. For example, the question about work on agricultural holdings in agricultural censuses is often so badly worded that work is construed solely as the regular exercise of a remunerated activity. As a result, many women are not recorded in agricultural censuses.
Selecting the wrong respondent	In this case, the respondent selected is not in a position to report correctly either on the people belonging to the household, or the people working in the business or on the agricultural holding. For example, male respondents may report women who are actually working on an agricultural holding as not economically active.
Using the wrong enumerator	Enumerators can introduce biases and personal values in the way they formulate questions as a result of their own prejudices, insufficient training or simple carelessness. (See section 3.2.6).
Communication problems	These problems arise when respondents fail to understand the content or language of the questionnaire. This may occur if question wording is too technical or the terminology too complex and the impact may be greater in interviews with women than with men.
Obscuring the truth	In this case, respondents deliberately give a wrong answer, either to meet some socially acceptable norm or because they are fearful or suspicious about why the question is being asked. For example, a man may deny that his wife works on an agricultural holding, or a woman may deny there are any domestic violence issues in her household.

Testing questionnaires

Data items and questions should be tested as part of the questionnaire development process. This should allow any gender-related problems to be identified and corrected before a questionnaire is finalized.

One relatively low-cost method for testing whether data item concepts and terminology are appropriate and relevant for both females and males (or other subgroups of respondents) is through *focus groups*. Focus groups are small groups of people with differing backgrounds that

are selected from the target population for a collection. They can be used early in the development of a collection to investigate how women and men understand particular concepts, to explore the appropriateness of those concepts to their different experiences, to test possible definitions of terms, and to help in determining the language to be used in the questionnaire. Feedback from these groups can assist collection designers in developing questions that will work effectively and minimize gender bias.

In addition to focus groups, a number of other techniques can be used to formulate questions that minimize bias. For example, once a draft question has been written, trained methodologists can conduct *cognitive interviews*, or *pre-tests*, with a variety of potential respondents to gauge their understanding of the question, the ease or difficulty with which it can be answered, and the likely range of answers. If men and women perceive a question to have different meaning, it may be possible to revise the question to be more consistently interpreted. Alternatively, depending on the survey objectives, one might write different questions or use different examples for male and female respondents.

Pilot tests, or *field tests*, of draft questionnaires are further tools for ensuring the appropriateness of the data collection method. This type of testing involves interviews in a field context with a sizeable number of people from the target population. It allows problems to be identified and corrected prior to the full collection being conducted. In some cases, data collected in the tests may provide useful preliminary indicators of results from the full collection. Outcomes from the tests can also be used to estimate likely response rates as well as sample error, sample sizes and population variability.

Box 3.5 uses a national survey conducted in the United States to illustrate the way gender-related objectives can influence sample and questionnaire design, and the value of focus groups and cognitive interviews in developing questions on gender-related topics.

A special case: the importance of question wording in measuring women's work

A particular area where country experience has shown that question wording can make a significant difference is in measurement of labour force participation by women and men. In many countries, this effort has reflected concerns about underestimation of women's participation in economic activity. Such underestimation may arise, for example, where questions in censuses or sample surveys do not adequately capture information about the work of women on the family farm or in home based activities (see section 4.3 on unpaid work).

Various techniques have been used by countries to make labour force questions in different types of collections more gender-relevant. One approach is to modify the wording of questions and/or include some extra questions to ensure all the activities of interest are reported. For example, in the context of household sample surveys, many countries have supplemented conventional labour force questions relating primarily to paid work with questions relating to unpaid work.

Box 3.5: Impact of gender-related objectives and question testing on the USA's American Time Use Survey

In the development of the continuous American Time Use Survey (ATUS), a number of estimation objectives were established. A core objective was to measure time spent in 17 major activity categories by labour force and relevant household and demographic characteristics of respondents. Results of other surveys indicated that time-use patterns were strongly correlated with whether respondents had children as well as with respondent gender. Knowing this, the sample designers included a stratification cell for presence and age of children in the household. Without prior planning, it is possible that the relatively small sample in the survey would not have provided reliable measures classified by this important household characteristic. Another goal was to measure "passive" or "secondary" child care (in addition to primary child care). Neither of these terms would have been clear to respondents. Designers defined the concept as time when respondents were responsible for the well-being of their children, were generally aware of what they were doing, and could intervene if necessary. To assist in the process of writing questions, two focus groups were held with both men and women with varying educational attainment. Video clips of respondents providing this type of care to children were shown to the participants, who then offered multiple terms for describing that care. These terms were tested using cognitive interviewing and associated debriefings. Ultimately, a term offered by focus group participants – "having a child in one's care" – was chosen.

Source: United States Bureau of Labour Statistics (2007a, 2007b)

Another approach is to use a list to identify activities that qualify as economic activity but, from the perspective of the respondent, might not be considered such. For interview-based collections, this might involve the interviewer reading out a list of specific activities to ascertain whether the respondent engaged in any of them for pay, profit or family gain during the reference period. Alternatively, the activity list might be built into the questionnaire by asking about each activity in turn.

Box 3.6 provides further background concerning the issues involved in measuring women's work and highlights the main factors underlying the data capture problem.

Boxes 3.7 and 3.8 provide two country examples of the way questionnaire design has been used to improve the measurement of women's work. The first example shows how the United States changed question wording to improve the measurement of women workers in its Current Population Survey. The second example shows how Pakistan has incorporated an activity list into its Labour Force Survey questionnaire, resulting in much improved measures of female labour force participation.

Box 3.9 shows how Guatemala used a separate study, in combination with its agricultural census, to make women's work in agricultural production more visible.

Box 3.6: The problem of measuring women's work

The work of women and their contribution to the national economy tends to be subject to more under-reporting and misrepresentation than the work and contribution of men. Labour force statistics often exclude some types of work in which women are more highly represented. There are three main factors contributing to this.

(i) Difficulties in identifying or describing certain types of work

Jobs that are difficult to identify and describe may be held by women more often than men. Such jobs may involve no cash remuneration. The work may be irregular, or organised on an informal basis. The work may also be undertaken intermittently with household chores close to or at the person's home. (See chapter 4 section 2 on informal employment.)

Work of this kind may be hard to identify through business surveys if the jobs concerned are not covered by a country's legislative or regulatory framework, or if the businesses or other bodies for whom the work is done are not registered. Such work may also be hard to identify through household surveys if those doing it do not consider themselves to have a job. In both types of surveys, the jobs involved can be hard to describe if they are not based on standard work methods and practices.

Even jobs that involve stable, paid employment may be hard to describe if they are in areas that are less regulated. Such jobs are likely to be less well documented and differentiated from each other. For example, jobs in those parts of the service sector where the proportions of female workers are often higher may be less regulated than those in other parts of this sector or in other sectors such as manufacturing.

(ii) Lower priority given to measuring certain types of work

The aspects of work that are highlighted or suppressed when collecting labour force data depend on the priorities underlying the measurement instrument. In many countries, there are regular Labour Force Surveys whose primary purpose is to provide timely indicators of labour market trends for use in economic policy decision-making and in labour market negotiations. For these purposes, the focus is mostly on market-oriented work and its economic value (e.g., work activities that are remunerated in cash or that are geared towards selling goods and services for money). The value added of household work that is mainly geared towards producing goods and services that will be consumed by households tends to be of less interest in this context. Consequently, capturing such work as part of these surveys may be considered low priority and other data collection instruments may be unavailable for this purpose. (See chapter 4 section 3 on unpaid work.)

(iii) Limitations of data sources and methods

Costs and other limitations associated with data gathering practices also affect the measures that are produced. These limitations vary depending on the source. For example, household sample surveys may exclude people living in the more remote areas or in group facilities and business surveys may exclude certain activities or very small establishments. In developing countries, the exclusion of holdings without land, or with very little land, from agricultural censuses and surveys can obscure the important contribution made by women to agricultural work.

Whatever source is used, the characteristics to be measured have to be grouped into categories which highlight certain aspects while suppressing others. As it is not possible to measure the continuum of work situations in the labour market, categories like the 'employed', the 'unemployed' and the 'economically inactive' need to be created using a limited set of criteria. Similarly, it is impossible to measure all the characteristics of each job on every occasion, and so certain characteristics are given precedence over others. For example, details of a person's occupation, status in employment and earnings from employment are often collected with greater frequency than their place of work, working conditions, barriers to work and unpaid voluntary work.

Box 3.7: Improving the measurement of women workers in the United States of America's Current Population Survey

In the Current Population Survey conducted monthly in the United States, the definition of employment is intended to capture persons who worked at least 1 hour during the survey reference week (among others). Prior to 1994, however, the opening question to gauge the economically active population probably did so more effectively for men than for women, as it focused on respondents' main activities. It read, "What were you doing most of last week - working, keeping house, or something else?" For women who primarily kept house but also did some paid work, this question appears to have led to some underreporting of work. A redesign of the survey, which examined gender bias as well as other issues, led to a change in the question. It now reads, "Last week, did you do any work for pay or profit?" Following the redesign, the survey found an increase in the number of workers, primarily women, who usually worked fewer than 10 hours per week.

Source: United States Census Bureau and Bureau of Labour Statistics (2007b)

Box 3.8: Improving the measurement of female labour force participation in Pakistan's Labour Force Survey

In Pakistan's Labour Force Survey, an activity list was added to the employment questionnaire to better account for people engaged in informal and unregulated work. This list covered work activities that the persons who performed them tended to disregard as work.

The list covered 14 types of activities. For example, it included: agricultural operations (e.g. ploughing, sowing, transplanting rice, weeding field etc.); food processing (e.g. milling, grinding, drying seeds etc.); construction work (e.g. mud plaster of roof and walls of house, repair of boundary walls, etc.); clothes making (e.g. sewing pieces of cloth, knitting, weaving, etc.); and shopping and marketing. Respondents were asked whether, during the last week, they helped or worked in each of these listed activities and, if so, for how many hours. For some activities they were also asked to separate the hours between activities performed for their own family and those performed for other people for cash or payment in kind. Only when specifically asked about these activities were many of the participants revealed as workers. The use of the list more than doubled the number of women classified as economically active, resulting in a significant increase in the labour force participation rate of women in Pakistan. In contrast, there was no change in the participation rate for men.

Labour Force Participation Rates in Pakistan, 2005-06

	Activity Rate with Standard Questions	Activity Rate with Activity List
Total	46.0	57.0
Men	72.0	72.0
Women	18.9	41.1

Source: UNECE 2008b

Box 3.9: Improving the visibility of women's work in Guatemala's agricultural sector

In Guatemala, backyard farming is an important activity for family self-sufficiency and is carried out within the area that includes the house. To investigate this activity, a Backyard Holdings Survey was undertaken alongside the 2003 National Agricultural Census. The results from the Census showed that male agricultural holders predominated (92%), whereas in the Backyard Holdings Survey female holders were predominant (79%). These findings were important in raising the visibility of women's contribution to agricultural production and household food security, as well as contributing to future data collection efforts.

3.2.6 Selection and training of enumerators

Skilled enumerators are another extremely important factor in producing unbiased statistics. The essential features of an enumerator need to be carefully evaluated and verified during selection. Aside from the skills and motivation needed for the job, sometimes the sex, age or ethnic affiliation of the enumerator may be important. In victimization surveys, for example, it is thought that female interviewers improve the disclosure

of sensitive events such as sexual assault, regardless of the gender of the respondent.

On the other hand, in countries where sexual discrimination is more prominent, a female interviewer may have additional difficulty in obtaining an interview (UNECE-UNODC 2008).

Before passing to the data collection and processing phase, enumerators need to be well-trained to carry out effectively and rigorously their role in collecting and processing data. For example, interviewers and their supervisors need to understand the purposes of the collection, the concepts and definitions used, the questions included on the collection instrument, the procedures to be followed, and communication techniques for engaging with respondents to obtain their cooperation.

Training programs and manuals are important in developing the requisite understanding, skills and motivation, and in ensuring that all enumerators use a standard approach. Lack of uniformity can be a source of bias. These programs should provide instructions and guidance on how to undertake all phases of a data collection and give contextual information about the collection and its objectives. It can also be helpful to provide examples of the uses made of data from previous collection cycles.

To obtain gender-relevant information, enumerators need to be particularly aware of gender issues, including the differing ways females and males might respond to a topic or particular forms of questioning. For sensitive topics, such as domestic violence or mental health, they need to be aware of the different types of personal situations that respondents may have experienced and be able to manage their own reactions when seeking details of these situations.

Training in techniques to deal with difficult or emotional interviews can help to ensure enumerators react professionally and appropriately in all circumstances, controlling their own emotions. Such training might be backed up by the establishment of support networks to assist enumerators in coping with the stresses that arise while working on sensitive topics. Such networks might include access to counsellors, other enumerators, office contacts and voluntary emotional debriefing sessions at the end of enumeration. Training should be on-going and the enumerators' activity should be monitored throughout the survey.

3.2.7. Data collection and processing

Collection mode

The success of a collection will depend to a large extent on the suitability of the collection methodology. There is wide variation across countries in effective modes of data collection. These modes include collection of data by telephone, mail, face-to-face interview, self-compilation, and the web, as well as in various types of administrative settings. Computer-Assisted Telephone Interviewing (CATI) or Computer-Assisted Personal Interviewing (CAPI) in the case of face-to-face surveys are sometimes used instead of compiling printed questionnaires.

A number of factors play a role in the choice of collection mode. Social norms, technological infrastructure and costs are particularly important and may limit the choices. Collection characteristics also play a role, such as the type of data needed to meet the primary objectives, the complexity and sensitivity of the topics to be covered, the nature of the questions, and privacy and confidentiality concerns. Other significant factors include the impact on response rates; respondent preferences; the location of respondents; the nature of the sampling frame; and the characteristics of the target population. For example, in some countries it may not be possible to obtain a representative sample using telephone surveys, which are generally based on a sampling frame of landline phone users. Households having only a mobile phone are increasing, and these may differ from other households producing bias in the results (e.g. there may be a higher proportion of young, single-person households, living in rented apartments, among those without a fixed line).

Possible gender effects should also be considered. Different collection modes may affect, or be perceived by, men and women differently. If a particular method works better for either women or men, or affects their response rates differently, it could lead to biased gender measures.

In interview-based collections, measurement bias can also occur if communication and understanding between interviewers and interviewees are influenced by personal or cultural characteristics. The age, sex, appearance or manner of the interviewer may affect the answers obtained in different ways. In some cases, shared characteristics may have a positive impact on response, while in other cases they may have a negative impact. This possibility needs to be considered and,

where appropriate, action taken to minimize the data quality risk.

Box 3.10 provides an example of a face-to-face survey – Australia's 2005 Personal Safety Survey – where field tests and other research suggested that the gender of the interviewer might have a different effect on responses by females and males to certain types of highly personal questions. It illustrates how this risk was managed to avoid the problem arising when the full survey was conducted. Box 3.11 describes the efforts made in Belgium to avoid gender bias in their survey operations.

Editing and imputation

Many statistical agencies use editing and imputation techniques to address item non-response when processing questionnaires.

These techniques often assign a value to a missing response using an algorithm. For example, if a respondent does not provide an answer concerning a particular characteristic, an answer may be assigned based on his or her other responses or the responses of others in the same or similar households.

In the case of imputation, a "donor" record may be identified based on a pre-determined set of characteristics similar to those of the respondent. Missing values in the original record are then replaced with values borrowed from the donor record. For example, a missing earnings value may be replaced with an earnings value from a donor with similar sex, age, occupational and educational characteristics. Analysts defining imputation algorithms should pay attention to places where gender bias could be created, such as imputing hours of work or earnings from all workers rather than from men or women with similar relevant characteristics.

While a 'not stated' code may be allocated for some item non-response, this is not usually done for core variables such as sex and age which are frequently cross-classified with other characteristics of people. For example, the recommendations of the Conference of European Statisticians for the 2010 Population Censuses specify that sex and age should be derived if they are missing or incomplete (UNECE 2006b).

Weighting and benchmarking

Weighting is the process of adjusting results from a sample survey to infer results for the total population. It involves attaching weights to each sample unit to indicate how many population units (e.g. households or persons) are represented by the sample unit. These weights are calibrated against population benchmarks to ensure that survey estimates conform to the independently estimated distribution of the population by age, sex, area of usual residence etc., rather than the distribution within the sample itself. Calibration to population benchmarks helps to compensate for over- or under-enumeration of particular categories of persons due to either the random nature of sampling or non-response.

As response rates often vary across demographic groups, these estimation techniques ensure each group is correctly represented in the estimates generated for the total population.

For example, as women tend to respond to surveys more frequently than men do, weights tend to be larger for men than women.

Box 3.10: Managing interviewer effects: Australia's 2005 Personal Safety Survey

Interviewers for Australia's 2006 Personal Safety Survey (PSS) were chosen from a panel of the Australian Bureau of Statistics (ABS) interviewers used for household surveys and included some interviewers who had worked on the previous survey on this topic, the 1996 Women's Safety Survey (WSS). Expert advice, evidence and experience gained from the WSS and findings from the PSS field tests indicated that both men and women were more inclined to communicate sensitive information to a female, than to a male, and feel more comfortable doing so. Based on this, female interviewers from the ABS panel of household survey interviewers were used. Respondents were given the option of a male interviewer upon request. Wherever possible, senior and more experienced interviewers were recruited to work on the PSS. Interviewers were provided with an information paper which explained the content of the survey and some of the challenges they might encounter. Based on this, interviewers then decided whether they wanted to work on the survey.

Source: ABS 2006c and 2006d. http://www.abs.gov.au/

Box 3.11: Actions to reduce error from gender bias in Belgian survey operations

In Belgium, an effort is made to avoid gender bias by raising awareness and instructing and training interviewers to adhere strictly to standardised questions. Even so, the wording of a question can be adapted to sex using computer assisted personal interviewing (CAPI). Characteristics of the interviewer can also influence the response and only by encoding these characteristics of the interviewer in a global database is it possible to analyse outcomes - age and/or ethnicity can influence response.

In a survey on migrants, care was taken to match interviewers and respondents. Muslim women were only contacted by female interviewers.

Bias can also come in through the mode of contact. For example, in Belgian telephone interviews middle-aged women are easier to contact than middle-aged men or younger adults, because they are more likely to be at home. For the same reason, face-to-face interviews reach more single women than single men.

The Statistics Belgium homepage can be found at: http://statbel.fgov.be/

3.3 Data sources

3.3.1 Types of collections

Within the statistical production process described above, existing sources are evaluated and data collection methods are chosen and developed where necessary.

There are mainly four different types of collection: Population Censuses, population-based sample surveys, business surveys and administrative records. Each is a major source of gender statistics. While the information they provide is generally complementary, they are based on different methodologies which affect the type, range and quality of gender information they can provide.

In general, there is not one source that can provide better or more gender-relevant information than others. The quality of the information provided for gender analysis by each source depends on many factors, including the concepts, definitions and classifications used, the way questions are asked, and the collection methods used to obtain data. We have seen in the preceding sections of this chapter that gender bias can arise in any of these areas.

A particular issue that arises in many countries (as well as between countries) is inconsistencies in measures produced from different sources. There can be many reasons for this. For example, it may be due to a lack of well-defined and established definitions of some complex concepts (e.g. violence, work, earnings, poverty, social exclusion, etc.) or to differences in methods of data collection (e.g. responses on self enumerated questionnaires may differ from those given to an interviewer, and responses provided in phone interviews may differ from those in face-to-face situations). Methodological reviews may help in understanding the inconsistencies and in determining the best way to address their impact.

3.3.2 Population censuses

Why is this source important for gender statistics?

A population census is typically the largest statistical collection undertaken by a country and one of the most important. While the objectives of a census are specific to individual countries and differ according to local circumstances, the broad aim is to measure accurately the total number and key characteristics of people in a country and in its smallest geographical areas at a specific time. This information is vital for national, regional and local planning, for policy development and evaluation, and for many administrative purposes.

The census collection methodology may involve direct collection of information from people and/or obtaining information indirectly through existing population registers. Where information is collected directly from individuals, this may involve self-completion questionnaires (paper or electronic) or interviewer-administered instruments. To reduce respondent burden, some countries make use of a short form for all the population and a long form for a sample.

Whatever methodology is used, the data collected for each person in the population invariably includes sex and age, as well as other basic demographic and social characteristics (e.g. marital status, place of birth, and place of usual residence). Generally, a range of other topics are also covered, such as relationships between household members, educational attainment, economic activity status, occupation and housing arrangements.

Box 3.12: Conference of European Statisticians' recommendations for the 2010 Censuses of Population and Housing

In view of the 2010 round of population and housing censuses, the Conference of European Statisticians (CES) adopted a set of recommendations. The CES Recommendations provide guidance for countries in determining their core and non-core topic content, data item definitions, classifications, question wording and collection methodology. The CES Recommendations can be downloaded on the UNECE website at:

www.unece.org/stats/census

Population censuses are a rich source of information for examining differences between females and males across many dimensions of life. They can also be used to study particular population subgroups from a gender perspective, such as elderly women and men or those living in rural areas, and to analyze gender issues at the local community level. Statistics can be produced according to specific household types and family composition.

How can this source be improved to provide more gender-relevant data?

The planning process for the 2010 round of population censuses provides opportunities for countries to review past practices to ensure that a gender perspective is incorporated in all aspects of the methodology and at all stages of the statistical process (see Box 3.12).

It is critically important to obtain wide community support for the census to ensure high response rates and accurate reporting. Many countries conduct major public relations campaigns around the time of the census to increase public awareness of the importance of the collection and everyone's role in making it a success. Such campaigns can contribute to much better reporting of some gender-sensitive data. The process of raising awareness of the census and its uses, including gender-related uses, should be a long-term and continuous pursuit.

Census questions should be improved to contain more gender-relevant concepts, as has been discussed in the section on survey design.

New content may be required in some cases to provide additional gender insights, for example by including questions which will enable the correct identification of subpopulation groups and minority status. In adding new questions to the census, care should be taken to ensure that overall data quality is not compromised (e.g. due to respondents perceiving the questionnaire as too long or intrusive) and that costs do not become prohibitive. This might require some trade-offs, such as cuts to existing questions.

Alternatively, it might be possible to include additional responses in existing census questions with limited additional cost or respondent burden. In many situations, it might be more cost effective to include the new questions in a household sample survey and limit the census to basic benchmark information.

To reduce respondent burden, censuses are becoming at least partly register-based in several countries. The impact of such change on gender statistics should be monitored and evaluated, since register-based data may misrepresent reality to some extent and differently for women and for men. For example, among irregular immigrant workers who have not taken up legal residence in a country (and therefore are not included in the registers) there may be more men than women in some countries. Dissemination of census data is often an area where improvements can be made. Products based on censuses generally present data at the territorial level but without a gender perspective. Not only should data be timely, but key findings on gender-related issues should be presented in a way that policy makers find easy to understand and translate into government policy. The Central Statistical Office of Ireland for example produced a publication utilizing the data from the 2006 census to analyze disparities related to gender and other factors such as sexual orientation, family status, age and disability (CSO 2007). Options for improving the accessibility of sex-disaggregated data should also be considered. For example, better electronic access to microdata might encourage researchers to make greater use of the data in their gender analysis.

Box 3.13 provides some experiences from Nepal and India showing how they improved their 2001

Population Censuses from a gender perspective, resulting in better statistics for gender-sensitive policy formulation and program planning.

3.3.3 Population-based sample surveys

Why is this source important for gender statistics?

Population-based sample surveys collect information directly from individuals and can cover a very wide range of topics in some depth. The data collected invariably includes sex and age of each individual in the sample. Some surveys have a multi-purpose focus and cover many discrete topics. Some have a more general social focus and cover a range of topics with the aim of exploring the relationships between them and analyzing cross-cutting issues such as multiple disadvantages. Others focus primarily on a particular topic, such as labour force participation, education, health, disability, crime and safety, social capital or time use. Some may be specially designed to provide statistics about a particular population group, such as indigenous peoples or migrants.

Statistics produced from these surveys are generally a key part of a national statistical program and complement those produced from Population Censuses. They provide important measures of various aspects of people's wellbeing, including trends over time, transitions during the life-cycle, and differences in outcomes within and across population groups.

The gender information they provide informs many areas of social and economic concern. It is

Box 3.13: How to make Population Censuses more gender-relevant: some experiences from the 2001 census in Nepal and India

Nepal	In Nepal, the major impacts of the 2001 census engendering process were: • Several concepts, including household, work and extended economic activities were redefined so that they were more gender sensitive. • New questions were included, e.g. to identify households with at least one female member with ownership in house, land, and/or livestock. • Answer categories for several other questions were modified or enlarged (e.g. marital status). • Census data were analyzed from a gender perspective (e.g., all the individual information collected in the census was disaggregated by sex and the results were published). • Occupation and industry classifications were developed and prepared to suit the Nepalese situation (e.g. some of the extended economic activities typically done by Nepali women). These changes, together with a massive awareness-raising of respondents, contributed to a general improvement in gender-sensitive data from the census. Increases in female literacy rates and female labour force participation rates were indicative of the improvements. Also, for the first time, data on polygamy and remarriage became available, providing additional information on the marital statuses prevailing in society. As expected, the new data showed that men were more likely than women to remarry, and three times more likely than women to have multiple spouses. The 2001 census findings on marital status showed that, by adding one or two categories to an existing census question, it was possible to obtain more gender-sensitive data without adding a substantial burden of cost.
India	Between the 1991 and 2001 Indian censuses, special efforts were made to improve the enumeration of females. Nationally there was an improvement in the sex ratio of the adult population in 2001, but the child sex ratio in the 0-6 age group showed a substantial decline, revealing a grim picture of the girl child in some areas of India. This finding was picked up by the media, sparking a major campaign ('Save the Girl Child') to control and monitor female foeticide. A number of remedial measures were introduced at national and state levels as a result of this finding. In the case of female work, the 2001 data showed an upward trend in the female participation rate, both nationally and in many states where the rate was previously very low. The data also showed a significant increase in the number of female marginal workers, suggesting considerable improvement in capturing data on this topic in the 2001 census.

Source: *Engendering Population Census in South and West Asia* (UNFPA, 2004)

widely used in economic and social policy formulation and monitoring; planning and evaluating government service provision; and research into social and economic conditions and progress.

Surveys may be conducted on a regular basis, or may be less frequent or one-off. They may be cross-sectional, providing 'snapshots' of the population and their lives at a particular time, or longitudinal, following the same group of individuals over time thereby shedding light on the dynamic nature of many aspects of life, including pathways and causal factors. Both types of surveys can be complementary and both can provide valuable gender perspectives.

The main type of population-based survey is the household survey, which collects information on people living in private households. Collection methods typically involve personal interviews that obtain information about the household in which the individual lives as well as about the individual. These interviews may be conducted either face-to-face or by telephone, and with or without computer assistance. In some cases self-completion questionnaires are also used to obtain data (e.g. on particularly sensitive gender-related topics, or on topics requiring detailed diary records).

How can this source be improved to provide more gender-relevant data?

While population-based sample surveys allow considerable control over the type and quality of data collected, obtaining reliable gender-relevant information can be difficult in some fields. In some cases, the data needed for gender analysis may be collected on an *ad hoc* basis only.

Where there are significant data gaps, a review of the content of existing surveys may be appropriate to ascertain whether these can be addressed through those surveys (see, for example ABS 2007b). It may be possible to increase the amount of gender-relevant information by adding short question modules to these surveys in those areas where gender disparities are higher. Some countries have found this to be a cost effective way of obtaining data on issues that policymakers have placed high on the national agenda. For example, many countries conduct regular Labour Force Surveys to measure levels and trends in employment, unemployment and labour force participation. As sex and age are among the core demographic variables in these surveys, the inclusion of additional modules can add considerable value to the gender perspectives available without impacting on the primary use of the data.

Box 3.14 provides an example showing how Australia improved the gender-relevance of its 2005 Personal Safety Survey and how it is addressing inconsistencies between its survey-based measures of violence. Box 3.15 illustrates one way in which countries have used the Labour Force Survey to obtain data on additional topics.

3.3.4 Business surveys

Why is this source important for gender statistics?

Business (or enterprise) surveys refer to statistical collections about businesses and other organizations engaged in economic activity.

These collections include censuses and sample surveys relating to particular industries or activities (e.g. manufacturing, agriculture, services, etc.) as well as economy-wide surveys (e.g. covering employers, small businesses, etc). The frames for these surveys are generally created from a business register that records a certain amount of information about each entity. Both the surveys and registers can provide gender-relevant information if sex-disaggregated data are collected for the individuals engaged in the entity (managers, owners and employees). The extent to which this occurs varies across countries and collections, generally reflecting user priorities and the availability of such data from business records.

Box 3.14: Improving the usefulness of survey data on violence in Australia

The 2005 Personal Safety Survey conducted by the Australian Bureau of Statistics collected information about experiences of physical and sexual violence, as well as abuse, harassment and people's feelings of safety within the home and the community. This was the first national survey on this topic that obtained information about both women's and men's experiences. The previous survey on this topic, in 1996, collected information only on the experiences of women.

The results of the 2005 survey enabled gender differences to be analyzed for the first time. For example, the survey found that:

- most Australian adults (95% of men and 83% of women) felt safe at home after dark;
- about one in 20 women (5.8%) and one in 10 men (11%) reported experiencing violence in the 12 months prior to the survey;
- since the age of 15, 40% of women and 50% of men reported experiencing at least one incident of violence;
- in relation to sexual violence, 1.6% of women and 0.6% of men experienced this type of violence in the 12 months prior to the survey, with the most likely perpetrators being family members or friends (39% for women and 44% for men).

While every effort was taken to ensure that the 2005 survey data for women was comparable with those collected in the 1996 survey, comparisons could not be readily made because of differences in data collection methods and differences in the concepts and definitions used to measure violence. Even where the same, there were some significant differences in the measures produced due to methodological and procedural factors, context effects and question wording.

An interagency review was undertaken to determine the best survey method for meeting user needs for crime victimization and related data in the future. It examined the differences in methods and frequencies of data collection and developed a preferred survey model which should produce better integrated and more useful data. The new model is now being implemented.

Source: ABS 2006c, 2006d

Box 3.15: Attaching additional modules to Eurostat's Labour Force Survey

The 2005 Eurostat Labour Force Survey included an ad hoc module on reconciliation between work and family life to meet a number of policy needs in this area. Taking into account these needs and the constraint of 11 variables for the module, the aims of the module were:

- to establish how far persons participate in the labour force as they would wish, and where they are unable to do so, whether the reasons are connected with a lack of suitable care services for children and dependent persons;
- to analyze the degree of flexibility offered at work in terms of reconciliation with family life; and
- to estimate how far leave of absence is taken, such as parental leave to care for children.

The module was designed to collect data from everyone aged 15-64 years in the households selected in the survey sample. Sex and age disaggregations were available from the survey's core variables.

From the perspective of producing gender statistics, business surveys can provide very valuable information about female and male workers, including the types of jobs they hold, their working conditions, and their different contributions to economic activity. They can also provide information about female and male entrepreneurs and small business owners or managers, including the types of businesses they operate and the success of these businesses.

Examples of the types of statistics that can be produced from these sources are shown below.

- *Workers*: numbers, average weekly hours and earnings of males and females in different industries and occupations; differences in hours and earnings between full-time and part-time male and female workers; differences in their working and remuneration arrangements by jurisdiction; differences in the composition of their earnings (e.g. ordinary time or overtime); and differences in the way their pay is set and the extent to which this is associated with differing pay outcomes.
- *Entrepreneurs*: female and male participation rates in entrepreneurial activity; motivation for start-up of small businesses by gender; start up difficulties by gender; and the employment and turnover of these businesses.
- *Agricultural holders*: the differing proportions of women and men who are responsible for agricultural holdings; the types and sizes of their holdings; and the location and value of production of their holdings.

Data of this kind can be used together with data on related topics gathered from household surveys to examine issues such as the gender pay gap, the gender gap in business creation and ownership, and

gender roles and responsibilities within the rural social context. Care is needed when using data in this way as there may be differences in the concept being measured in household and business surveys as well as differences in the methodology for collecting the data that may impact on data quality.

Box 3.16 illustrates how a business survey can be used to obtain sex disaggregated data on entrepreneurship, using the example of 12 East European countries.

Box 3.16: Survey on Business Starting and Development Conditions in 12 East European countries

This survey was carried out in 1999 in 12 countries – Albania, Bulgaria, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia, Slovenia and the former Yugoslav Republic of Macedonia. It was conducted as part of the Demography of Small and Medium-Sized Enterprises (DOSME) project. The questionnaire was sent to a sample of new small and medium-sized enterprises appearing to start their activities in 1998. These businesses were identified from registrations with administrative sources. A second DOSME project started in 2001, surveying new registrations in 1999 and 2000 and following-up on active enterprises (although sex and other characteristics of the founder/ manager were not asked in the follow-up survey).

The DOSME project was the first major international study to focus on the characteristics of the people managing /owning the enterprises, including sex, rather than on the characteristics of the enterprises. The questionnaire collected data about each business and about the person who started it. The business data included form of organization and details of operations. The personal data, which were only sought for sole proprietors or main partners in a partnership, included: sex, age and educational level of the entrepreneur; why the business was created; sources of capital used to start the enterprise; investment in capital equipment or buildings in the reference year; and difficulties experienced by the business in selling its products or services and in developing its activity.

The survey results were subsequently published and are available on the DOSME website (EC 2008a).

How can this source be improved to provide more gender-relevant data?

There are various areas where business surveys might be improved to provide more gender-relevant data. To start with, sex-disaggregated data should be made available. In some cases, sex-disaggregated data may be available but more detail or a different focus may be required to support analysis of gender issues adequately. For example, there may be deficiencies in the level of detail available for the self-employed and their businesses. More data may need to be collected about types of self-employment, and about the survival and growth of different types of businesses, to under-stand how the gender of the owner or manager might influence business behaviour and outcomes.

Coverage issues may also need attention, as many surveys use business size cut-offs or exclude certain geographic areas or industries. For example, gender-sensitive agricultural statistics may need to cover holdings without land, which are often excluded from agricultural census enumeration and sample surveys due to a minimum threshold for land area, introduced for cost considerations.

In developing countries, many women work in holdings with no or only tiny areas of land. In order to measure women's contribution to agricultural work and to construct a complete picture of holding types, these very small holdings need to be identified and covered.

The Food and Agriculture Organization of the United Nations has developed guidelines and gender-sensitive definitions of key concepts to assist countries to incorporate gender considerations into agricultural censuses and surveys (FAO 2004, 2005). These are embodied in its recommendations to countries for the 2010 round of Agricultural Censuses. Adoption of these in national collections should help to improve the quality of gender statistics at both national and international levels.

3.3.5 Administrative records

Why is this source important for gender statistics?

Administrative records are an important source of information for studying gender differences on a wide range of topics. In cases where an administrative record system operates effectively throughout a country, it can provide frequent data at both national and sub-national levels. Using these records to produce needed statistics can be a cost-effective approach, since the data they contain are already routinely collected as part of regular administrative processes. Such data may also offer insights into gender issues not well covered by census or survey data.

A significant proportion of the data held in administrative records relate to individuals. Such

data can often be classified by gender, as many records already include the sex of the person concerned. The extent to which sex is recorded reflects, to some extent, the regulations and laws of a particular country. For example, where tax is imposed on the household or couple rather than the individual, tax registers may not be sex-disaggregated to the same extent as where individuals file returns.

A wide range of statistics can be produced from data held in administrative records, including statistics relating to education, health, criminal justice, birth, death and marriage, work and economic activity. For example, personal income tax records are a potential source of useful statistical information, both on economic empowerment and on access to income support benefits. Overall, women are likely to pay less personal tax than men because, in general, they earn less than men. Tax records may reveal to what extent this pattern holds in a particular country. They can also show, in countries that have family-related or child-related benefits, whether these are paid predominantly to men or women.

One of the advantages of administrative records is that they represent a full enumeration of the relevant entities, rather than a sample. For this reason, they may have the potential to provide more reliable and finely disaggregated data than sample surveys. However, their usefulness may be limited by other factors. In particular, their coverage will reflect only those entities of interest for the administrative function being performed, the details recorded may not be current, and definitions and classifications may be inconsistent with those required for statistical purposes. For example, some administrative records in the labour field may only cover employees of formal businesses. Some might cover only permanent (ongoing) workers. Other records may only cover the situation of citizens, or of legal immigrants, because it is only these people who are entitled to particular benefits.

Many countries make extensive use of administrative records in producing gender statistics. Boxes 3.17 and 3.18 use the examples of justice statistics in Serbia and, education statistics in Mexico respectively, to illustrate how such records have proved valuable in producing gender-relevant information in those countries.

How can this source be improved to provide more gender-relevant data?

Administrative systems can be hard to modify as their primary focus is not statistics. In seeking improvements in the data from these systems, the actions that are possible will reflect the individual circumstances of each country, including the variety of organizational arrangements that are in place. Some aspects that might require special attention from a gender statistics perspective are discussed below.

An important gap in many countries - particularly less developed ones - is birth and death registrations by sex resulting in a large proportion of births not being counted. This is considered a critical challenge, as setting up and maintaining a civil registration system that allows the timely and regular production of statistics on births and deaths requires a major commitment by government.

There are many other areas where changes in data collection concepts and methods may be needed to realize the full value of administrative data for addressing gender issues. For example, police and court records can be used to understand the criminal justice system's response to domestic violence, but this is only possible if information on the victim's sex and relationship to offender is collected in the primary record. Also, there needs to be a well-defined and accepted definition of domestic violence and agreed procedures for recording relevant incidents.

Production of statistics on some topics may involve compiling data from a number of different administrative sources. Agreement between agencies to standardize aspects of their administrative systems can facilitate the sharing of information, such as using consistent identifiers. Also, the coverage of an administrative dataset and the definitions it uses are subject to change as policies, regulations and administrative procedures change. A description of the statistical impact of such administrative changes should accompany all data series.

Box 3.17: Use of administrative records in producing justice statistics in Serbia

The Statistical Office of the Republic of Serbia compiles justice statistics from 9 regular data collections that obtain data from administrative systems. The reporting units for these collections are public prosecutors' offices and courts. All criminal offence acts that are stipulated by the criminal law and other legislation dealing with criminal offences are observed. The aim of the collections is to follow the criminal offenders through the justice system. The data collected on offenders includes: kind of criminal offence; sex; age; occupation; nationality; outcome of investigations; and sentencing outcomes.

For example, data collected on the offence of people trafficking by adults revealed that there were 68 crime reports in 2005. These involved 67 known perpetrators, 5 of whom were women. The outcomes from these reports were: 12 cases where the report was denied; 11 cases where the investigation was stopped; and 44 cases where charges were filed. For those cases where charges were filed, 10 persons were sentenced, with 9 of them being sentenced to imprisonment.

As women are the main victims of certain crimes (e.g. sexual abuse, rape, sex trafficking and forcible marriage contracting), data on these crimes can be used to make some inferences about gender victimization. From 2007, further insights will be possible as the age and sex of the victim are being collected for charged and convicted offenders.

Box 3.18: Use of administrative records in producing education statistics in Mexico

The usefulness of statistics derived from administrative records in Mexico has been demonstrated in some actions of social policy in the field of gender equality. Starting in 1997, information about school dropouts began to be broken down by sex, providing evidence of the higher dropout rate for girls. Having this information, Mexico's Human Development Opportunities Programme sought and received additional resources to provide more scholarships to girls with the aim of achieving their longer retention in the school system. This allowed a higher proportion of scholarships to be granted to girls than boys.

After several years of implementation of this measure, the gender gap in elementary education has practically disappeared.

In most registers relating to people there is information about sex but in many countries this information is not used in producing statistics for general release. Sometimes no statistics at all are produced from the records, or the statistics are only available on a restricted basis. In these cases, the focus should be on raising awareness of the importance of sex-disaggregated data for gender analysis and on developing tools and mechanisms to facilitate the timely extraction and wide dissemination of such data.

Production and dissemination of statistics from some administrative systems may be undertaken by a national statistical agency under an agreement with the custodians of the administrative records. In many cases, however, this statistical role may be dispersed across a range of agencies whose core business is not statistics production. Such agencies – often the custodians – may be especially resistant to addressing gender issues if the changes involved increase costs or add to the reporting load on them or their clients. Those responsible therefore need to be convinced of the usefulness of their data as a component of the wider national statistics effort.

Significant improvements in the usefulness of administrative data for statistical purposes can sometimes be achieved through focused, collaborative efforts involving statistical producers, relevant data custodians and users. These efforts might be directed towards negotiating agreed definitions for existing measures, developing new measures, arranging access to administrative lists for sample frame creation, establishing standard data compilation practices, or determining dissemination priorities and associated strategies. Some countries have found it productive to undertake work of this kind within an agreed framework, such as an inter-agency partnership agreement or information development plan for a particular field of statistics.

Box 3.19 illustrates some of the ways statistical agencies can seek to influence the quality of administrative data for statistical purposes, using the experiences of Ireland and Australia as examples.

Box 3.19: Influencing the quality of administrative data for statistical purposes: some examples

Australia	The Australian Bureau of Statistics (ABS) and the Australian Institute of Health and Welfare (AIHW), under agreements with other agencies, maintain data dictionaries and other statistical standards for use in compiling national minimum data sets and other key statistics from a wide range of different administrative systems operating in different jurisdictions. These standards allow uniform national statistics to be compiled in fields such as births and deaths, causes of death, crime and justice, hospital services, diseases, health workforce, housing assistance, and disability and welfare services. (AIHW 2005). The ABS has also issued a statement of Key Principles and a Handbook for Australia's National Statistics Service. These relate to all agencies that produce statistics from whatever source. The purpose of the Handbook is to provide a reference guide for use in conducting collections, extracting data from administrative systems, managing statistical data, turning administrative or survey data into statistics, and subsequently analyzing the statistics. (ABS 2008a).
Ireland	As part of a policy of developing the statistical potential of administrative data across government agencies, the Central Statistics Office (CSO) in Ireland undertook an examination of social data holdings in 6 key government departments in 2003. The resulting report made a number of recommendations in relation to the use of standard questions and classifications across data sources. These recommendations included: • Some social statistics are more meaningful at the individual, family or household level. Where relevant, data holdings should be structured so that case-level or event-based information can be aggregated to compile individual, household and family statistics. • All official data sources should use standard classifications and coding systems. The CSO should take a lead in promoting, maintaining and disseminating these classifications. • The CSO should work with departments to develop a core set of demographic and socio-economic variables. These could either be independently collected in administrative schemes and surveys or preferably, subject to meeting data protection restrictions, available via a central repository such as the Department of Social and Family Affairs Client Records System. Spatial information and nationality should be included in this core set. • Individual departments should develop a common look and content in the design of their administrative scheme application forms. This will ensure that the core information is collected in an identical manner across all schemes.

Box 3.20: Examples of recent or current data linkage projects

Australia	In the lead up to its last Population Census in 2006, the Australian Bureau of Statistics (ABS) initiated a project to add value to the census data. This involved the establishment of a Statistical Longitudinal Census Dataset (SLCD) based on a 5% random sample of census records. The SLCD will bring together data from Australia's successive 5 yearly censuses, starting from 2006, using probabilistic linking techniques. Through this project it is envisaged that the census can be made more useful to researchers. It will offer, for example, a rich data source for longitudinal studies of gender-related issues in the coming years.
Ireland	The Central Statistics Office in Ireland is involved in projects linking related data holdings in different Departments, such as pensions and income data. The Office also undertook a post-census national disability study in 2006, which brought together data from the Population Census for a selected group of people with data for those same individuals collected in a subsequent sample survey. Both initiatives are adding to the body of gender-relevant information available to policy makers, planners and researchers.
New Zealand	Statistics New Zealand (SNZ) has created Linked Employer-Employee Data (LEED) to provide insights into the operation of the labour market and its relationship to business performance. LEED draws on administrative data from the taxation system together with business data from SNZ's Business Frame. SNZ produces an annual report based on this linked information. The report provides a range of annual longitudinal statistics about people's interaction with the labour market as well as their sources of income. It includes information on income and earnings transitions, job tenure, multiple job holders and self employment. Findings in the 2006 report included: • there were nearly twice as many women as men holding multiple jobs; and • women tended to earn less than men for each job, regardless of how many jobs they held.

3.3.6 Linked data sources

In some cases, linking or combining data from different collections may add considerable value to the separate statistics compiled from each source.

Linking may involve bringing survey data together with census or administrative data; bringing different administrative data sets together; or bringing data together from different census cycles or from different survey cycles. Whether it is feasible to link, and how this is done, depends on whether comparable definitions and classifications have been used, the costs and benefits as well as confidentiality and privacy considerations.

Some examples of recent or current data linking projects in different countries are provided in Box 3.20.

3.4 Time Use Surveys

3.4.1 What are Time Use Surveys?

Time Use Surveys are a type of population-based sample surveys which are particularly useful for gender statistics and analysis. We will therefore describe this data source in more detail.

Time Use Surveys collect information from individuals on what they do with their time and how they allocate it to different activities over a specified period, typically 24 hours of one or more days. They provide a picture of people's daily lives and are a rich source of gender-relevant information.

Statistics produced from these surveys show the activities people engage in, how much time is spent doing each of these activities, and the context in which they are undertaken. The statistics are usually disaggregated by sex, age group, rural/urban, and other population groups of interest to those who analyze the data. Often supplementary topics are added to the surveys to extend the analytic potential of the statistics.

3.4.2 Why are Time Use Surveys important?

Time is a fundamental resource that can be used in many different ways. How people use this resource affects their social and economic wellbeing and has implications for the wellbeing of their families and the wider community in which they live. Data from Time Use Surveys are important for understanding these effects and how they differ by sex. The patterns of time allocation by women and men reflect differences in their roles, conditions and opportunities and have consequences for their family and social life as well as their personal fulfilment.

Statistics from Time Use Surveys are widely used in policymaking, planning and research in many social and economic fields. By having information on how people spend their time, analysts and researchers are better able to understand the non-economic as well as economic effects of policy decisions, and how these differ by gender. They are also in a better position to assess when new policies or services should be developed or existing ones adjusted to address the changing needs of women and men.

The statistics can inform debate on many issues associated with the quality of life and the nature of social and economic change. They can show how much time people spend on activities such as paid and unpaid work, sleeping, caring for children or the elderly, volunteering, or relaxing. In showing the different patterns of time-allocation associated with gender, Time Use Surveys highlight roles and conditions of women and men in family and social life. They can also provide information on where, and with whom, people spend their time. For example, they can show how much time mothers or fathers spend with their children regardless of what else they might be doing at the same time and whether they are at home or somewhere else.

Time use statistics are invaluable for research into the relationships between paid work, unpaid work and leisure, and for understanding these relationships from a gender perspective (OFW 2007). The statistics are vital for exploring issues such as division of labour within households and the extent to which women and men experience time stress. They can also be used to examine the effects of change in one area on another, such as increases in female and male education levels on differential patterns of participation in paid and unpaid work, civic life, travel, leisure, etc

In many countries, there is considerable debate about work/life balance. Time use statistics can shed light on the different ways that women and men balance their work, family and other needs and commitments. For example, the statistics can show how much time is devoted to work (paid and unpaid) and what remains for discretionary

Box 3.21: Time use data and their uses: Australia's 2006 Time Use Survey

The survey provides information on:

- time spent on unpaid work in the home and community by women and men;
- care of children and other dependants inside and outside the household;
- the relationship between domestic care of other persons and the nature and extent of labour force participation by various household members;
- differences in the hours of paid work for women and men, and barriers to labour force participation;
- balancing paid work with other aspects of life;
- outsourcing of domestic tasks;
- patterns of leisure activity, such as relaxation, participation in fitness and health activities, and involvement in sports and cultural activities;
- lifestyles of people at different stages of the life cycle;
- daily life patterns and support needs of women and men in particular groups, such as older persons, unemployed persons, and persons with disabilities;
- transport and travel issues;
- the penetration and use of technology in households and how this affects the way people spend their time; and
- the nature and extent of people's social ties, such as time spent with family members in the same household, with relatives in different households, and with friends.
- The information is available for men and women separately, as well as by age and other demographic and socio-economic characteristics such as household size, composition and income. Changes in patterns of time use over the years can be analyzed by comparing results with those from the previous surveys in 1997 and 1992.

Source: ABS 2000; ABS 2008b; ABS 2008c

and other uses. As the surveys generally allow work to be contextualized within a 24 hour framework, it is possible to study sequences of work episodes and how they interact with other activities. If data on simultaneous activities are collected (not just primary activities), the overlap of different times can also be studied, such as work undertaken while travelling, or with family members. Some surveys include questions on the level of satisfaction with the way time is devoted to different aspects of life, and on feelings of time stress. Such data can provide further insights into how well women and men are balancing the demands of their jobs, childcare, their need to relax or exercise, and their other commitments or needs.

For measuring time dedicated to paid work, studies have suggested that Time Use Surveys provide a more accurate source than Labour Force Surveys (ISTAT 2007), covering, for example, atypical cases of paid work which are usually not included in Labour Force Surveys and in which women are generally more involved. But, one of the greatest values of time-use surveys for gender analysis is that they shed light on unpaid work. In many economies, large amounts of unpaid work fall outside conventional definitions of economic production. From a gender perspective, it is crucial to collect information on the time devoted to this type of work, since the respective contributions of men and women to such activities are not equal. Reliable data on the volume of different types of unpaid work are generally only available from Time Use Surveys. A number of countries have used such data, in combination with various valuation methods, to produce estimates of the value of unpaid work, including by sex. These estimates have allowed unpaid work to be analyzed within a national accounting framework and in some cases have been used in developing household satellite accounts, produced separately but consistently with the system of national accounts (see section 4.3 on unpaid work).

Box 3.21 illustrates the range of data that can be provided and some of the uses, by taking Australia's Time Use Surveys as an example.

3.4.3 Value added of gender in time use statistics

A gender dimension is crucial for many studies of time use. For example, time use data disaggregated by sex (and other demographic characteristics) are necessary for analyzing issues such as the division of labour within households; the extent to which men and women contribute to different types of productive activities inside and outside the home; the role social networks play in their lives; the balance between work and leisure for women and men in different types of households; the way caring for children is shared and how this changes as children age; and gender differences in daily activity patterns at different stages of the life cycle.

Comparisons over time, using data disaggregated by sex from Time Use Surveys conducted in different years, can provide valuable additional

information. Such data can be used, for example, to identify trends in male and female patterns of paid and unpaid work, to examine the extent to which there is convergence or divergence in these patterns over time, and to analyze a wide range of other issues associated with the changing roles of women and men within families and society.

As an illustration of the type of information that can be obtained from Time Use Surveys, some gender-related findings from a range of national surveys are shown in Box 3.22.

3.4.4 Data collection methods

International guidelines

Several international agencies have produced material on data collection methods to assist countries in planning and conducting Time Use Surveys. In particular:

- The United Nations published a *Guide to Producing Statistics on Time Use: Measuring Paid and Unpaid Work* in 2005 (United Nations 2005). This guide provides a broad overview of national practices and international initiatives in the field of time use statistics. The Guide is intended as a reference tool and is aimed at facilitating the harmonisation of methods and practices.
- The United Nations Economic Commission for Europe maintains a section on Time Use Surveys on its Gender Statistics Website (UNECE 2008c). It provides details of national methodologies for undertaking such surveys as well as links to international guidelines relating to Time Use Surveys. In addition to detailed information on the methods and practices of a number of individual countries, the website includes sample copies of the collection instruments they use and presents some of the main statistical data produced from the surveys.
- The European Commission first issued *Guidelines on Harmonised European Time Use Surveys* in 2000, publishing them in 2005 (EC 2005a). These guidelines were updated in 2008 subject to two principles: comparability with previous guidelines and simplification (EC 2009). The purpose of the guidelines was to ensure EU member countries implemented Time Use Surveys on a comparable basis so that results would be comparable, thereby greatly increasing the value of the data obtained. The guidelines provide detailed recommendations on methodology, including questionnaires, diaries, activity classification and coding, fieldwork, estimation procedures and basic statistical tables.

Time use diaries and questionnaires

Time use surveys generally collect data from a sample of households in the reference population using face-to-face or telephone interviews with selected individuals in those households. While countries use a range of survey instruments and methods, they typically collect the basic time use data through a time diary and a range of additional information through household and individual questionnaires.

Particularly important for gender statistics is the inclusion of questions that will allow disaggregation by sex, age and household composition. Other personal and household characteristics, such as education, labour force status and income, are also needed to support many types of gender analysis.

Several different types of time use diary are used by countries that conduct Time Use Surveys. The most common approach is to use a 24 hour diary that provides for exhaustive recording of all activities of a respondent over one or more 24 hour days, including when and where each activity occurred. The diary may be completed in respect of one or more members of a household, and be designed for self completion or for an interviewer to administer either in a face-to-face context or by telephone.

'Full' or 'light' diary options

The diary may be either a 'full' diary or a 'light' diary. The *full diary* allows for verbatim recording of activity descriptions (including simultaneous activities), their starting and ending times, and accompanying contextual dimensions such as for whom each activity was undertaken and when and where it was undertaken. These activities are then coded to a detailed activity classification. The *light diary* typically seeks less detail about each activity, with the activity descriptions restricted to a more limited set of pre-coded activity categories. Boxes 3.23 and 3.24 illustrate the full and light diary approaches, respectively, using Australia's 2006 Time Use Surveys as an example.

Box 3.22: Examples of gender-related findings from national Time Use Surveys

United Kingdom 2005	Overall, women carried out about two thirds of the domestic tasks in 2005 – women spent on average 178 minutes a day on domestic tasks compared with 100 minutes among men. Women in all economic categories spent longer on domestic work than men – for example, women who worked full time spent 151 minutes on domestic work compared with 113 minutes spent by men who worked full time. Men tended to work longer hours in their paid job than women on average. Travel related to employment was also more evident among men while women's trips were more concerned with domestic tasks such as shopping. Men used the private car more than women. Men were more likely than women to watch TV, spend time on the computer and take part in other leisure activities. Women were more likely than men to spend time reading or with other people. (ONS 2005)
Canada 2005	Between 1986 and 2005, the workday became longer for both men and women – by 0.6 hours for men and 0.7 hours for women. Women still do most of the housework and tend to feel more time stressed than men do. But now more men are juggling household chores and paid work duties, while women are spending more time at the office. As a result, the gap between men and women in the division of labour is still there, but it is slowly getting narrower. (STATCAN 2006c)
Australia 2006	Men and women spent their days in different ways in 2006. On average, men spent 19% of the day on recreation and leisure, 19% of the day on employment-related activities, and 7% on domestic activities. Women spent much less time on recreation and leisure (16%), nearly double the time spent by men on domestic activities (12%), and about half the time that men spent on employment-related activities (10%). Compared with 1992, there was little change in the time men spent on employment- related activities or domestic activities. However, the time women spent on employment-related activities increased by 12%, while the time they spent on domestic activities declined by 5%. For parents of children under 15 years, mothers spent much more time than fathers on child-care activities, whether or not the parents were employed. This pattern was reflected across the age spectrum of children and across different types of caring. For both mothers and fathers, the time spent on caring activities decreased significantly as the age of the youngest child increased. (ABS 2008c)
18 European Union countries 1998-2004	Based on a Eurostat analysis of results from national Time Use Surveys, patterns of time use were generally quite similar throughout Europe. On average, women aged 20-74 spent much more time than men on domestic work, ranging from less than 50% more in Sweden to over 200% more in Italy and Spain. Men spent on average more time on gainful work/study than on domestic tasks, whereas the opposite was true for women in most of the countries surveyed. The total hours worked per day – i.e. gainful work/study and domestic work – was shorter for men than women in most countries. While the amount of free time tended to be lower for women than men, how it was distributed was quite similar for women and men and from one country to another. (Eurostat 2008)

Alternative approaches

The choice between a full and light diary depends on a range of factors, such as the analytical objectives of the survey, available resources, literacy of respondents, and survey comparability, both nationally and internationally. Often trade-offs will be needed. For example, the full diary approach produces a rich data set, but resources may not be available to conduct such surveys with the frequency users would like. This has encouraged various countries, to adopt, or explore the feasibility of adopting, an approach where interviewers ask respondents to recall their activities on the previous day rather than fill in a detailed diary. This method can be particularly useful for measuring time use of populations where illiteracy rates are high and self reporting through a diary would be problematic (UNDP-RBEC 2005). It should be kept in mind that moving from a full diary to a light diary approach may impact the comparability of time use data over time. Also, the United Kingdom has had experience with both approaches. It used the full diary in its 2000 Time Use Survey and the light diary in its 2005 Time Use Survey, conducted as part of its 2005 National Statistics

Box 3.23: Full diary collection method: Australia's 2006 Time Use Survey

The 2006 Time use survey, conducted by the Australian Bureau of Statistics, collected data from around 3,000 randomly selected households using a combination of face-to-face interviews with an adult member of the household, involving questions about the household and each usual resident, and a self-completion paper diary for each household member aged 15 years or over to be completed on two specified days following the interview. The diary covered a continuous period of 48 hours commencing at midnight and asked for the person's primary and secondary activities in 5-minute time intervals, as illustrated below. Contextual information about each activity episode was also sought. The designated days in respect of which the diary was to be completed were marked on the cover of the diary by the interviewer.

Day 1	3 hour time blocks (12 midnight to 3am, 3am to 6am, 6am to 9am, etc)				
5 minute time intervals	What was your main activity? (Please record all activities even if they only lasted a few minutes)	Who did you do this for? (e.g. self, family, work, friend, a charity, the community)	What else were you doing at the same time? (e.g. childminding, watching television, listening to the radio)	Where were you? (e.g. at work, home, on a bus, driving the car)	Who was with you at home, or with you away from home? (e.g. no-one, family, friends)
6.00					
6.05					
6.10 etc					

Necessary time	1. Personal care activities
Contracted time	2. Employment activities 3. Education activities
Committed time	4. Domestic activities 5. Child care activities 6. Purchasing activities 7. Voluntary work and care activities
Free time	8. Social and community interaction 9. Recreation and leisure

Respondents were asked to describe their activities in their own words, rather than select from a pre-coded list of activities, as this allowed greater detail to be collected which would meet the needs of a wider range of users.

The activities recorded in the completed diaries were subsequently office-coded into around 270 detailed categories using Australia's Time Use Activity Classification. The classification provides for these detailed categories to be grouped into 64 broader categories and 9 major categories. The 9 major categories can, in turn, be presented in terms of 4 different types of time, as shown in the left hand column.

Source: ABS 2008b

Omnibus Survey[13]. Based on an evaluation of both approaches, it concluded that the light data set would be worthwhile in its own right and would provide an indication of any major changes in time use since the full diary collection. It noted that there were limitations in terms of having only 30 activity codes in the pre-coded 2005 diary, compared with around 250 in the office-coded 2000 diary; that there were some difficulties in matching codes completely across the two surveys; and that some of the changes in data between 2000 and 2005 could be due to the differences in collection methods.

3.4.5 Other measurement issues

Measurement issues generally associated with population-based surveys are also relevant to Time Use Surveys. However, there are some particular issues applying to Time Use Surveys that can affect the usability of the resulting statistics especially with respect to gender analysis. The more significant issues are outlined below.

[13] http://www.statistics.gov.uk/STATBASE/Source.asp?vlnk=657

Survey scope

As there is increasing analytic interest in many countries in how children and older people spend their time as well as time use by other population groups, the reference population and the areas and dwellings to be covered in the survey may need special attention when determining its scope. For many gender analysts, age is a key variable. Most countries that have conducted Time Use Surveys in recent times have applied an age cut-off at the lower end of the age range in order to exclude all or some children. While most have not applied a cut-off at the upper end of the age range, they may exclude a proportion of older people if the special dwellings where some of these people reside are excluded from the scope of the survey.

Box 3.24: Light diary collection method: Australia's 2006 Time Use 'Lite' Survey

During 2006, the Australian Bureau of Statistics also tested an alternative method of collecting time use data using a light diary rather than the full diary. It conducted a Time Use 'Lite' Survey on a sample of 1500 households as a component of its Multi-Purpose Household Survey. The purpose of the test was to determine whether results from the abbreviated survey were comparable with those from the full survey conducted in the same year. Data from the Time Use Lite Survey test will not be released but a paper evaluating the usefulness of the survey should be published.

The collection method was based on a computer-assisted telephone interview with a person aged 18 years or over randomly selected from the usual residents of the household. A series of questions recorded all the activities of the respondent in the 24 hours from 4am on the previous day (or one day earlier in some cases), including the time spent on each activity and for whom it was undertaken. No other contextual information about each activity was sought, and where two activities were undertaken at the same time only the most significant activity was recorded. The use of computer-assisted interviewing allowed interviewers to use an activity coder, based on a look up list of activities drawn from the full Time Use Survey coding database.

The key differences between Australia's abbreviated survey and full survey were that:

- the abbreviated survey involved an interviewer asking respondents to recall their activities on the previous day, whereas the full survey asked people to maintain a diary of their activities on 2 specified current days following a face-to-face interview;
- activities in the abbreviated survey were coded to 30 broad activity codes only, whereas activities in the full survey were office-coded to around 270 detailed categories;
- the abbreviated survey was limited to one respondent per household aged 18 years or over, while the full survey included all household members aged 15 years and over;
- the abbreviated survey focused on capturing main activities, while the full survey captured these as well as additional contextual information about each activity episode (i.e. where the person was, who else was with them, and any other activities undertaken at the same time);
- the abbreviated survey was conducted as part of a multi-purpose survey, with demographic and some socio-economic data collected as part of the multi-purpose survey's core data set, whereas the full survey was able to collect much richer information about household circumstances through household and personal questionnaires in addition to the time use diary; and
- in terms of outputs, the full survey can provide much richer data.

The abbreviated survey should provide estimates of time spent on unpaid and paid work and other major activity classes at lower cost and possibly more quickly than the full survey. If results are comparable, the abbreviated survey could be used between full surveys to update the value of unpaid work and track changes in time use patterns at more frequent intervals.

Source: ABS 2006a

Also to be kept in mind is that the different age limits that countries apply in defining the reference population may affect international comparability. For example, the age cut off used to exclude children among countries participating in the Harmonized European Time Use Surveys ranged from 3 years (Italy) to 20 years (Sweden) (EC 2005a).

Where children are within scope of the survey, it may be appropriate to have two versions of the time use diary: one for adults and one for children, with the text and examples tailored for each group. *The Guidelines on Harmonized European Time Use Surveys* provide examples of both versions, while noting that the actual diary component is the same (EC 2004).

Survey design

Sample designs need to take account of seasonal and other variations in the activities people undertake throughout a year and on different days of the week. Reflecting this, surveys are generally conducted either continuously over a year or in several periods across the year with diaries distributed as evenly as possible

throughout the days of the week in each collection period. As people often vary their activities depending on the time of year or day of the week, uneven capturing of activities could result in under or over reporting of some activities and to different extents for women and men. To achieve an even representation of the days of the week for which activities will be reported, diary-keeping days are generally worked out in advance and should not be changed.

Survey content

A particular challenge for many Time Use Surveys is achieving an appropriate balance between content and respondent load. Questions on a range of topics, in addition to time use, can significantly increase the value of the data for different types of gender analysis and may be strongly sought by users. Maintaining content comparability with previous Time Use Surveys may also be an important requirement. However, the time it takes respondents to complete interviews and diaries can impact on response rates and the quality of reported data, so content decisions need to be taken with this in mind.

One technique used by Canada in its 2005 Time Use Survey to allow more content while keeping respondent burden to a minimum involved splitting the sample for some parts of the questionnaire. Respondents were randomly assigned to one of the two sub-samples.

Respondent cooperation

Overall response rates can be relatively low in some Time Use Surveys as these can be quite onerous for the selected households, particularly the diaries. Non response can result in biased estimates to the extent that non-respondents differ from the rest of the sample population, and the proportion of non-respondents may be different among women and men. To encourage cooperation and good response, the importance of the survey, its nature and guarantees of confidentiality should be explained in the initial contact with the household and reinforced at interview. These explanations need to be meaningful to different types of households. Examples of how the information collected in the survey will be used can be beneficial. Examples showing how the information is to be recorded in the diaries can also be very helpful.

Activity classification

Whatever collection method is used, a comprehensive activity classification or listing is needed, so that all activities can be classified appropriately. It is particularly important for gender analysis that the classification or listing provides for adequate representation of activities mainly undertaken by females as well as those mainly undertaken by males. The inclusion of a 'for whom' column in the time use diary can also be helpful, by providing additional information on the purpose of activities which can enable more accurate classification (e.g. it can help in distinguishing unpaid household work from unpaid volunteer and community work).

Many countries that have conducted Time Use Surveys in recent times have applied their own classifications to meet their own purposes, while others have used the trial International Classification of Activities for Time Use Statistics (ICATUS) first released by the United Nations in 2003. This international classification has been developed to assist countries embarking on Time Use Surveys and to facilitate international comparisons. It has a hierarchical structure, consisting of 15 major divisions, 54 divisions, 92 groups, 200 classes and 363 activity sub-classes (UNSD 2003).

For example, the ICATUS is adapted for regional purposes in Latin America. The Clasificación de Actividades de Uso del Tiempo para América Latina (CAUTAL) is comparable with ICATUS but includes activities identified in the Latin American time-use surveys[14].

Processing and estimation

Producing good quality estimates from Time Use Surveys is a complex process. The process can be particularly resource intensive for full diaries completed by respondents after interview, with activity coding and episode demarcation subsequently carried out in the office. It is vitally important for the reliability of the estimates that coders are accurate and consistent in their coding. A variety of tools and techniques are used by countries to achieve required coding standards. Box 3.25 describes some of the special data editing techniques that were used in the 2003 Italian Time Use Survey to improve the quality of data collected by diaries. Weighting adjustments may be needed to ensure days of the

[14] http://www.eclac.org/deype/noticias/noticias/2/38832/GTGenero_mexico.pdf

week and months of the year are equally represented.

Survey output

Care is needed when interpreting time use data, particularly 'average' times. The structure of statistical tables containing such data, and the conventions used, need to be well explained in survey output to assist those analyzing the data. Tables may show average time spent by all persons on an activity, or average time spent by only the participants in the activity. For example, average time spent on work by all persons will be an average over those who are not employed as well as those who are employed, and over weekends and holidays as well as on weekdays. Sometimes it will be more meaningful to look at how homogenous groups of people spend their time, such as employed men and women by age or family composition. Average times in tables relating to participants have different underlying populations so any calculations within these tables need to take into account the relevant population.

Also, tables may show participation rates rather than average number of hours spent on activities. The participation of women and men to specific types of activities is an important indication of their role in the family and the society. For example, in terms of average hours, Canadian men aged 25 to 54 spent 2.5 hours daily on unpaid housework in 2005, while women spent 4.3 hours. In terms of participation rates, it may be of interest to know that 69% of men did some housework daily compared to 90% of women (Statistics Canada 2006c).

Box 3.25: Data editing of diaries in the 2003 Italian Time Use Survey

In its 2003 Time Use Survey, Italy used both deterministic rules (involving automatic procedures) and non-automatic rules (applied by a trained staff of coders) to improve the coding of data collected by the survey's daily diaries.

Before coding, the words used by respondents to describe their main activities, parallel activities, activity locations and modes of transport used were recorded in a literal way in the survey processing system, resulting in a considerable number of strings (or episodes) for each activity. This enabled the respondents' words to be interpreted in context and particular types of reporting problems to be identified. The analysis of recorded strings – often written in the form of sentences – considerably increased the potential for formalizing correction rules and strategies for handling situations where the association between text and code was not a one-to-one linkage.

Computer-assisted coding was used because of the complexity of the coding process. This, along with continuous monitoring of coding work, helped to prevent errors in the coding process. Ancillary codes were used to point out particular coding problems concerning critical events and these were resolved by a researcher in a subsequent editing phase.

A wide variety of errors were uncovered in the editing process. For example, in the case of employment activities, over 60% of diaries involved at least one corrected episode; while in the case of study activities, over 46% involved at least one corrected episode.

Source: ISTAT (2008a, 2008b)

Chapter 4
Selected topics relevant to gender statistics and implications for data collection

4.1 Introduction

There are many issues and topics on which gender statistics are relevant and needed. In this chapter, we will look at a selection of topics in which a gender perspective is particularly important. For each topic, we will examine what it is, why it is important, the value that is added by gender statistics, how to improve data collection, and provide suggestions for further reading.

A number of gender equity issues relate to the field of work and employment. These are described separately in the first four sections:

- Size, structure and characteristics of the labour force
- Informal employment
- Unpaid household service and volunteer work, and
- Reconciling work and family life.

The first section - *Size, structure and characteristics of the labour force* – provides an overview of the concepts used to describe the labour force and how they are linked to "*productive activities*" as defined by the System of National Accounts 2008 (2008 SNA). It explains that the measurement of the currently active population groups the population into two mutually exclusive categories: employed and unemployed; and that these two categories, together with the population not currently active make up the total population of a country. It then illustrates the issues which are relevant to gender.

Gender equality is not only a matter of equal access to the labour market, and of equal opportunities to access jobs in the broadest range of industries, occupations, and professional levels, with adequate and comparable remuneration and decent working conditions. It is also a question of becoming self-empowered, a necessary step towards achieving equality between the sexes in all population groups. Occupational segregation and the gender pay gap, how to avoid underreporting of women's contribution to the national economy, biases that may arise in applying the International Standard Classification of Occupations (ISCO) and the International Status in Employment Classification (ICSE) are all covered in this section.

Informal employment is a primary source of livelihood for many people, particularly women. Because workers in informal employment are not fully covered by formal labour arrangements, they lack protection, rights and representation. Statistics need to be detailed enough to show the different conditions of employment of women and men. However, adequate measures of the informal sector are often lacking. This section defines the relevant concepts and refers to questions which can be used to capture informal types of work.

The section on *unpaid household service and volunteer work* refers to productive activities that are beyond the SNA production boundary but inside the general production boundary. These activities are often referred to as unpaid care work and volunteer work although this is imprecise as will be seen. Women tend to perform the bulk of the unpaid household service work, but since this is excluded from labour statistics as currently defined, their full contribution to the economy is often undervalued. Reference is made to the International Labour Organization's Resolution concerning the measurement of working time, within and beyond the SNA production boundary. Statistics on volunteer work are also lacking, despite its contribution to the economy and to quality of life. Reference is made to the International Labour Organization's recommendations concerning the measurement of volunteer work.

Reconciling work and family life is a cross-cutting issue dealt with in the next section. Family responsibilities are a major constraint on participation in the labour force. Childcare services and leave facilities can promote reconciliation between work and family life, as

will taking co-responsibility for sharing the burden of work required in the home between men and women (girls and boys). Labour Force Surveys provide basic statistics relating to employment but Time Use Surveys shed light on all activities and the balance between them, whether conducted at work, home or elsewhere.

Other topics relevant to gender issues covered in this chapter are:

- Entrepreneurship
- Decision-making
- Agriculture
- Access to assets
- Information and communication technology
- Education, research and science
- Health
- Gender based violence; and
- Gender attitudes.

The concluding sections of this chapter deal with two cross-cutting issues:

- Minority groups; and
- Social exclusion.

4.2. Size, structure and characteristics of the labour force

4.2.1 What it is

The labour force is the most commonly used measure of the "*economically active population*". According to the relevant resolution from the 13th International Conference of Labour Statisticians (ILO, 1983) it is "*all persons of either sex who furnish the supply of labour for the production of economic goods and services, as defined by the United Nations systems of national accounts and balances, during a specified time period*".

The formulation "*production of economic goods and services*" relates to the goods and services which are considered to be within the SNA production boundary, i.e., are taken into account in the estimation of the Gross Domestic Product (GDP), and thus constitute a **subset** of all goods and services actually produced in an economy. Excluded are unpaid services carried out by households for their own final use (except the housing services by owner-occupiers).

Furthermore, according to the 13th International Conference of Labour Statisticians (ICLS), the total population in a country can be classified into three mutually exclusive and exhaustive groups, as follows (ILO, 1983):

- *Employed* – All persons above a specified minimum age who during the reference period performed some work for wage or salary, or profit or family gain, in cash or in kind or were temporarily absent from their jobs.
- *Unemployed* – All persons above a specified minimum age who during the reference period were:
  - "without work", i.e. were not in paid employment or self-employment as defined by the international concept of employment; and
  - "currently available for work", i.e. were available for paid employment or self-employment during the reference period; and
  - "seeking work", i.e. had taken specific steps in a specified recent period to seek paid employment or self-employment.
- *Population not currently active* – All persons, irrespective of age, who were neither employed nor unemployed during the reference period.

The ILO resolution goes on to point out that the labour force is comprised of the first two of these three groups, but does *not* include "…*people who are not currently active*" (ibid.). Classification of the population into these three mutually exclusive and exhaustive categories depends on the application of the activity principle – what a person was actually doing during a given reference period – and a set of priority rules regarding activity that give precedence to employment over unemployment and to unemployment over economic inactivity. Classification also depends on a clear understanding of the SNA production boundary, which determines which activities are to be considered as "employment".

It is important to note that the production boundary of the SNA can include activities which are paid or unpaid, and activities producing goods and services which are either sold in the market or not. The current international standards treat activities that produce goods which are retained by their producers for their own use as internal

transactions within the SNA boundary *if* the activity represents "*major flows of goods and services actually taking place within the economy that would otherwise have to be omitted*" (UNSD 2009a, page 6). For example, the following unpaid activities for own final use could be considered as productive activities within the SNA production boundary:

- Unpaid production of agricultural goods by household enterprises for own final consumption
- Unpaid production of any other goods for own final use by households, including the construction of dwellings, the production of clothing, furniture, cookwares, carrying water, fetching wood, etc.
- Production of housing services for own final consumption by owner-occupiers.

Excluded from the SNA production boundary – and therefore from employment – are the following nonetheless productive activities:

- The unpaid preparation and serving of meals within the household for the direct satisfaction of human needs or wants; it should be noted that preparation of a meal by paid domestic staff constitutes a paid service activity and therefore falls within the scope of the SNA production boundary.
- Unpaid "do-it-yourself" activities of decoration and undertaking minor repairs, often of a routine nature, of a kind that would normally be seen as the responsibility of a tenant, including purchases of materials for such decoration or repairs and fees, service and maintenance charges paid to builders, carpenters, plumbers etc.
- Unpaid household services, such as cleaning, looking after children, transporting household members, household accounting and management, etc.
- Some forms of volunteer labour (see §19.37 – 19.41 of SNA-2008).

Such unpaid activities (above) are considered productive by the SNA within its general production boundary. They have been excluded from the SNA production boundary due to measurement as well as conceptual limitations (c.f. §6.29 of SNA-2008).

Most of the volunteer labour activities are in principle already included within the SNA production boundary and should ideally be measured, such as unpaid activities carried out by volunteers for market or non-market enterprises.

There are important national differences in how and whether countries include unpaid workers producing goods for own final use in their national measures of employment. In Moldova, for example, persons who had worked 20 hours or more in the production of agricultural goods exclusively for own final use were considered as being employed. Most industrialised countries, however, exclude them.

Box 4.1 lists examples of unpaid non-market activities included and excluded in the SNA production boundary.

The fact that some volunteering and all unpaid household services, albeit productive activities, are excluded from the SNA accounts, does not imply that they should not be statistically measured. In most cases, these activities are primarily performed by women and represent an important contribution to the welfare of society and to the economy. It would be beneficial to identify persons engaged in unpaid household service work as well as in volunteer activities, whether or not they are included in the labour force measure. This has been done by many countries.

Section 4.3 reviews approaches to the measurement of such unpaid work that falls outside of the SNA production boundary and its importance to the development of:

- more comprehensive measures of all forms of (mainly but not only) women's work
- estimates of the contribution of the work to the economy that falls outside the SNA production boundary, and
- a better understanding of women's position on labour market.

4.2.2 Why it is important

Promoting gender equality in employment is widely recognized as an essential component of economic and social development and a key mechanism to combat poverty. It is also an important factor contributing to the economic empowerment of women in their families and communities, and in society at large. Women's participation in employment increases their contribution to household resources and their control over the allocation of those resources. This leads to greater economic independence and self-determination, which are both important for women's empowerment.

For these reasons, employment was identified as one of the key instruments for achieving the Millennium Development Goals (MDGs):

- Goal 1, *Eradicate extreme poverty and hunger*, identifies the attainment of full and productive employment and decent work for all, including women and young people, as one of its key targets.
- Goal 3, *Promote gender equality and empower women*, uses the share of women in wage employment in the non-agricultural sector as one of the key indicators to track progress in its attainment. (United Nations, 2000b)

Gender inequalities persist in a wide range of aspects relating to work. Socio-cultural attitudes, lack of co-responsibility in households and of options to control the timing and spacing of births, as well as employment policies perpetuate inequality in the labour market. Promoting gender equality in employment implies that women and men should have equal access to the labour market, including equal opportunities to access jobs in the broadest range of industries and occupations; to attain any of the various professional levels; to receive adequate and comparable remuneration for the work performed; and to have equal access to decent working conditions (including occupational health and safety), social protection, basic rights, contractual tenure and voice at work. In addition, male and female workers also have different needs and constraints. For example, maternity protection is relevant only for women, while parental leave affects both male and female workers and their households (ILO 2009).

Box 4.1: Examples of unpaid activities included and excluded in the SNA production boundary

Included (if the activity represents a significant proportion of the production for own consumption of that good in the country and if close market parallels exist)	**Excluded** (if provided by unpaid household members or volunteers)
Growing or gathering field crops, fruits, vegetables Producing eggs, milk and other food Hunting animals and birds Catching fish, crabs and shellfish Gathering firewood Cutting firewood and building poles Collecting thatching and weaving materials Burning charcoal Mining slate Cutting peat Fetching and carrying water Threshing and milling grain Making butter, ghee and cheese Slaughtering livestock Curing hides and skins Preserving meat and fish Making beer, wine and spirits Crushing oil seeds Weaving baskets, mats, textiles Making clay pots, plates, and furniture Dressmaking and tailoring Handicrafts made from non-primary products Constructing dwellings, farm buildings Building boats and canoes Clearing land for cultivation	*Unpaid care work:* Cleaning, decorating and maintaining, dwelling including small repairs Cleaning or repairing household durables, vehicles or other goods Preparing and serving meals Caring for, training and instructing children Caring for the sick, infirm or elderly people Transporting household members or their goods *Volunteer work:* Buying groceries for an elderly neighbour Volunteering as a teacher in a public school Serving on a grievance committee for a labour union Serving on a neighbourhood clean-up committee Giving assistance at a shelter for the homeless Serving as a deacon or usher at a church Providing legal advice without compensation Serving as a coach for a children's football league Making clothes for disadvantaged children Constructing housing for homeless families Helping a non-profit environmental organization gather water samples.

4.2.3 The value-added of statistics

Advocates for gender equality have long placed a high priority on improving statistics on women's participation in the labour force and of their wider productive role in the economy. In 1975 the World Plan of Action for the Implementation of the Objectives of International Women's Year, adopted by the Mexico City Conference, stressed that data on topics such as the *"equality of opportunity and treatment for women workers and their integration in the labour force …and their right to work, to equal pay for equal work, to equal conditions of work and to advancement"* were essential in formulating policies and monitoring progress (UN 1975, paragraphs 88-107).

Statistics on the economically active population provide a basic picture of the participation of women and men in the labour market. Through periodic collection of sex-disaggregated statistics on the employed, unemployed and currently not active populations we know that women's participation in the labour force has increased significantly across countries in the past decades. At the same time, the statistics reveal that, globally, fewer women are employed compared to men and that women still face a higher likelihood of being unemployed and of becoming discouraged job-seekers than men. "*Discouraged job-seekers*" are persons without work who are currently available for work but who have given up looking for work because they believe that they cannot find work. (they therefore are included within the *inactive* population). When these statistics are further disaggregated by age, it becomes clear that this is particularly the case for young women, who face the highest unemployment rates in nearly all regions except in the European Union (ILO 2009).

A comprehensive system of labour statistics that includes the collection, dissemination and analysis of sex-disaggregated information about the characteristics of workers, their jobs and their employers can reveal further details regarding differences in the employment conditions of women and men. Particularly important are employment statistics cross-classified by branch of economic activity, institutional sector, occupation, status in employment, income from employment, working time, and family situation, such as the presence of children in the household and their age(s). Such detailed information reveals, for example, that among those employed, women are less likely than men to be engaged in full-time regular employment in the formal sector. Instead, women tend to be employed for fewer hours; to engage more in part-time and seasonal work; to withdraw from the labour force for extended periods, to be concentrated in the less productive sectors of the economy, in low-paying occupations and in status groups that carry higher economic risk, such as contributing family workers and own-account workers; to work in informal jobs; and to earn lower salaries compared to men (United Nations 2000a). Women are also more likely to be involved simultaneously in unpaid care work and in unpaid or low-paid economic activity.

Women's employment tends to be concentrated in a relatively small number of occupations, far fewer than for men. On average, in OECD countries, half of women's employment is accounted for by only some 10 occupations, compared with about 20 for men (OECD 2007a). It is also important to know in what specific occupations women and men are concentrated. In Sweden for example, 97% of office secretaries are women, while only 1% of motor vehicle mechanics are women (Statistics Sweden 2006). This is sometimes referred to as *occupational segregation*. In general, it is important to investigate whether female-dominated occupations are lower-qualified, lower-paid, or of lower social status. Women generally find themselves in lower-paid occupations, but they often earn less than men even within the same occupational group – they may have lower starting salaries, may be promoted less often, or have more career breaks for reproductive and family reasons.

Availability of this type of information is essential in the design and evaluation of government policies aimed at creating employment, improving working conditions, and promoting the attainment of gender equality in employment. Such policies and programmes include: training and skills development; schemes to help particular groups of the population start or return to work; work-life balance policies; community work programmes; assistance in setting up enterprises; tax exemptions; and other positive incentives that promote employment. Detailed statistics on employment-related income disaggregated by sex, occupation, branch of economic activity, and other socio-demographic characteristics, such as level of educational attainment, are particularly important in formulating and evaluating government policies on income-generation and maintenance, alleviation of poverty and redistribution of income.

The gender pay gap

At present, several internationally agreed indicators exist to assess and monitor women's and men's access to and participation in the labour market. This, however, is not the case for the economic remuneration that women and men receive from employment. Among current efforts to develop such a measure is the gender pay gap (UNECE 2008d).

The *gender pay gap* is a powerful measure providing an overall picture of gender inequality in total pay for employment. It is calculated as the difference between average earnings of men and women as a percentage of average earnings

of men. Estimates of the gender pay gap differ widely depending on:

- the data source (household or enterprise surveys or administrative sources)
- the calculation method (use of the mean or median to calculate average wages)
- the type of wages considered (hourly or monthly wages, net or gross wages, inclusion or not of additional benefits)
- the categories of workers included in the calculation (often the gender pay gap is calculated for employees only since reliable data on the income from self-employment are often not available).

In 2007, the United Nations Economic Commission for Europe conducted an assessment of 12 countries in order to explore the availability and understand the effects of using different sources of data and concepts of income in the calculation of the gender pay gap. It found that there are important differences among countries in sources, concepts, definitions and coverage of data, and a more consistent approach is needed to improve data comparability. Ideally, the gender pay gap should be based on concepts of employment and all wage components that are as comprehensive as possible. This may not be realistic, as not all countries are able to measure them effectively.

Different approaches to the measurement of the gender pay gap depend on data availability but also on the intended policy use of the indicator. For example, the pay gap based on hourly wages is generally much lower than the one based on monthly (or annual) wages, due mainly to the higher percentage of women who work part time. The latter captures the impact of gender differences in working time and thus should be used if the objective is to measure differences in *take-home pay*, which will depend partly on different participation in the labour market and partly on different payments that women have compared to men. On the other hand, the figure based on hourly wages measures the difference in payment for the work performed (or unit-value), independently of the number of hours worked, and this is more relevant in cases where the aim is to use it as an indicator of the *overall position of women and men in the job market.* If the focus is on *differences in pay for work of equal value*, the indicator should be calculated separately for different occupations, comparing the income from employment of women and men within classes of jobs deemed to be of equal value.

The gender pay gap combines two key aspects in one measurement: gender segregation and discrimination. The first relates to differences in individual characteristics (such as level of education and work experience), and may be determined by personal choices or gender roles. The second relates to factors such as the "glass ceiling" effect which prevents women from reaching the highest-level jobs, or direct discrimination in which a woman with the same job performance as her male colleagues is paid less. Calculating the pay gap for specific groups of workers based on characteristics such as age, sector, industry, occupation, level of educational attainment, and years of seniority in employment, can lead to a clearer understanding of the reasons for gender pay gaps, and distinguish between the various factors underlying differences in pay. It will also help to identify specific groups of occupations or sectors where the gender gaps may be wider.

4.2.4 Implications for data collection

In 2003, the 17th International Conference of Labour Statisticians (ICLS) took up the topic of gender statistics and in its conclusions stressed the importance of mainstreaming gender in labour statistics not only to address gender concerns but also to understand labour market functioning more fully (Mata-Greenwood, 2003). The ICLS recommended that labour statistics should satisfy the following four requirements:

a) They will be based on a political will at all levels, in the various data collection and analysis agencies and in all agencies which can provide administrative information

b) The data collection procedures for labour statistics will ensure that, as far as possible, all relevant topics for describing gender concerns are regularly included. Such topics may include employment in the informal economy, non-SNA work, employment by detailed occupations and status in employment categories, income from paid work and self-employment, statistics on the life course, on lifelong learning and on working time

c) The data collection and processing procedures for labour statistics programmes will be designed to ensure that definitions and measurement methods cover and adequately describe all workers and work

situations in sufficient detail to allow relevant gender comparisons to be made. Household and establishment-based surveys as well as administrative sources are valuable and, in particular, periodical time-use surveys are crucial

d) The resulting statistics will always be presented as part of regular publications in a way that will clearly reveal differences and similarities between men and women in the labour market and the factors that may influence their situations. This can be done by (i) presenting relevant topics in sufficient and relevant detail and by (ii) providing statistics according to relevant descriptive variables, e.g. personal and family circumstances, work environment and institutional setting.

Some issues relating to the above-mentioned requirements are described below.

a) Political will

It is noteworthy that the list begins with the need for "political will". To truly mainstream gender in labour statistics, it is necessary to go beyond the simple requirement of disaggregation of labour statistics by sex and focus on the deep and complex issues which must be addressed in the development of statistics on the (perception of) economic roles of women and men. The changes required are far-reaching and political will is needed to achieve them. An examination of national labour statistics in terms of these four requirements is an important exercise in planning a country's gender statistics programme. It will reveal the strengths and weakness of the statistics currently available and the need for and feasibility of improving them.

b) Full coverage of all activities and work situations

The challenge underlying the second requirement is that the productive activities of women are different than those of men and they tend not to be described fully by the standard topics covered in labour statistics. Therefore, the contribution of women to the national economy is often subject to underreporting. The purpose of this manual is to give special attention to all topics which are essential in fully describing women's productive activities and their differences to men's. This section focuses on the productive activities defined by the SNA within its production boundary. These comprise those activities which produce goods or render services for sale or barter, and may include those unpaid activities that produce goods for own final use, if they represent a significant proportion of the production of that good in the country, as we have seen earlier (examples were given in Box 4.1).

In practice, however, only a few countries include unpaid production of goods for own final use in their definition of employment. Sometimes when such activities are included in the definition of employment they may not be recognized as such by the respondents. Because such unpaid activities tend to be primarily performed by women, their exclusion can result in an underestimation of women's participation in the labour force and their contribution to the economy.

To improve coverage of these activities, one approach involves the use of a list of activities that qualify as 'employment'. For example, the 2005/6 Labour Force Survey of Pakistan uses a list that includes examples of home based activities such as agriculture, milling and other food processing, handicrafts, construction and major repairs, fetching water, collecting firewood and specific personal or community work activities (see also Box 3.8 in the Section on Survey Design and Content in Chapter 3). Another approach involves adding one or two extra questions relating to unpaid activities to the conventional labour force questions. For example, Bulgaria includes a specific question on the production of agricultural or other goods for household consumption in its Labour Force Survey (see question n.3 in Box 4.2).

c) Definitions and measurement methods

An important issue involves the definitions and measurement of the **not currently active population**. Usually a lot of attention is given to describing and measuring the employed and unemployed populations. However, the category "not currently active" is equally important, especially from a gender perspective. Subpopulation groups within this category should be considered. For example, higher unemployment rates for men than for women in countries with economies in transition do not necessarily mean that women are more successful in finding employment, nor less interested in entering the labour market.

Box 4.2: Questions used to define the employed population in Bulgaria's 2008 Labour Force Survey

1.	Did you do any work for pay or profit during the last week (at least 1 hour)?
2.	Did you carry out any of the following activities during the last week: • production of agricultural or other goods (if you sell a part of it or if it covers the main part of household consumption) • selling fruits, flowers, newspapers, magazines, books, lottery tickets or other goods; sale-trade of currency
3.	Did you carry out unpaid work for a company, farm, owned by a relative or member of the same household during the last week?
4.	Although you did not work last week, did you have a job or an own enterprise, farm, business, that you were away from because of illness, holidays, maternity leave or other reason?

As noted in a World Bank report, in times of limited availability of job opportunities and less generous family and social policies to assist employed women with family responsibilities, women may become more easily discouraged than men in their job search and so would be counted as inactive rather than as unemployed (Paci 2002).

Another issue relates to the measurement of **unemployment**. "Seeking work" is a central criterion for defining the unemployed; however, it tends to be more relevant for men than for women. Many women who are available for work and who would take a job if offered, do not "seek" work because this activity requires time and mobility which women often lack because of the family responsibilities. Reasons for not seeking work may be related to labour market situations, such as the belief that no suitable job is presently available in the area, or it may be related to personal factors, such as the belief that they lack qualifications or that employers think they are too young or too old.

The same applies to the "availability criterion," which serves as a test of current readiness to start work (for example, to exclude from the unemployed, students seeking work after completion of the school year). Current international guidelines to measure unemployment define availability as being available to start work during the reference period (reference week or day).[15] In practice, however, many countries prefer to use a slightly longer period, e.g. the following 15 days or two weeks following the reference period to account for the fact that not everyone who is seeking work can be expected to take up a job immediately given other engagements. However, many women who are seeking work and would take a job if offered one are not available for work within the reference period because of family responsibilities which may require them to secure child-care or transportation facilities prior to commencing a job.

Approaches used to take into account these gender differences in employment-seeking behaviour and availability include identifying all persons not in employment who want to work and are available to work, even if they do not seek work (Mata-Greenwood, 1999). Another approach, as noted above, involves using a slightly longer reference period (e.g. the two weeks following the reference period or survey interview) to determine current availability.

An additional issue is that the **classifications** used to characterize jobs, often do not describe the different activities that women perform as well as the activities of men. Women more often than men work in "atypical" situations in informal, irregular and unpaid work outside of formal establishments. Characteristics of such jobs are often described less well and with less detail than the characteristics of more formal jobs. For example, the International Standard Classification of Occupations (ISCO) tends to have fewer sub-divisions of occupations in which women predominate (such as secretary), while the occupations which are male-dominated (such as craftsperson) are more finely delineated (Anker, 1998). ISCO 1988 tries to name all occupations in a gender-neutral way, for example to use 'firefighter' rather than 'fireman' and 'flight attendant' rather than 'air hostess'; however these terms are often not used in national codes. As a result, women in such occupations may not be correctly classified. Furthermore, the occupation "sex worker" is significant for women in some countries, but it is included only implicitly, in the 4-digit level sub-category,

[15] In accordance with the ILO standards adopted by the 13th International Conference of Labour Statisticians (ICLS).

"other personal service workers not elsewhere classified." ISCO has recently been updated to take into account developments in the world of work since 1988 and to make improvements in light of experience gained in using ISCO-88. The updated classification was adopted in December 2007 and is known as ISCO-08. The section of the classification dealing with clerical support workers has been reorganized to provide more meaningful detail for occupations in which large numbers of women are employed (ILO 2008b).

There are also biases in the application of the **Status in Employment** Classification. *Employees* hold paid employment jobs: they work for an employer and receive compensation for their work which is not directly dependent on the revenue of the unit for which they work. All others hold self-employment jobs, where the remuneration is directly dependent on the profits derived from the goods and services produced. Those who work in their own business or farm are defined as *employers* if they engage at least one employee to work for them in their business on a continuous basis and *own-account workers* if they have no employees. *Contributing family workers* help a member of the family run a business or farm, usually without pay. They cannot be regarded as partners, because their degree of commitment to the operation of the establishment is not at a level comparable to that of the head of the establishment (ILO 1993). However, women working in the family business, farm or shop are often counted automatically as contributing family workers even when they are working on an equal footing with their husbands. In such cases, international classifications recommend they should be identified as employers or as own-account workers (as their male counterparts).

Statistics on the structure and characteristics of the labour force should be disaggregated by **contextual variables** which reflect the workers' personal and family situations. This will explain the labour force participation and activities of women as compared to men in a more holistic way. Variables related to men's and women's personal and family circumstances include their age, their level of education, whether there are children in the household who need care, whether there are adults requiring assistance in the household etc. All these factors constrain the time and energy which women and men can dedicate to "economic" work. In many societies, men's and women's marital status will also strongly influence their participation in the labour force (in different ways). In societies practicing polygamous marriages, a variable which deserves attention is the rank among wives. Type of household (e.g. single parent, female headed, etc.) to which the person belongs is also a useful descriptive variable.

4.3 Informal employment

4.3.1 What it is

Informal employment and the related concept of employment in the informal sector are relatively new topics in labour force statistics that aim to capture different aspects of the informalisation of employment (Hussmans, 2003). In 1993, the 15th International Conference of Labour Statisticians (ICLS) adopted an international statistical definition of *employment in the informal sector* to refer to all jobs in informal sector enterprises; that is, in small[16] and/or unregistered, private unincorporated enterprises with no complete sets of accounts[17] engaged in non-agricultural activities[18] that produce at least some goods or services for sale or barter. Examples of persons employed in informal sector enterprises include self-employed street vendors and self-employed outworkers (home-based workers) if their enterprises meet the criteria of the informal sector definition.

Since not all forms of informal work take place within informal sector enterprises, in 2003 the 17th ICLS agreed to complement this enterprise-based concept with the broader job-based concept of *informal employment.* This latter concept places emphasis on the conditions of employment rather than on the characteristics of the enterprise to define informality of employment. Informal employment is thus defined as the total number of informal jobs, whether carried out in formal sector enterprises, informal sector enterprises, or households, during a given reference period. It captures all employment that is not regulated or protected. Those working in informal jobs include unregistered employees who do not have explicit,

[16] Less than 5 employees was later recommended for international reporting.

[17] These are enterprises owned by individuals or households that are not constituted as separate legal entities independently of their owners, and for which no complete accounts are available that would permit a financial separation of the production activities of the enterprise from the other activities of its owners.

[18] Including secondary non-agricultural activities of enterprises in the agricultural sector.

written contracts and, as a result, are not subject to labour legislation, but are not limited to these. They also include workers who do not benefit from social protection, paid annual leave, sick leave or pension schemes even though they may have regular contracts. Sometimes these types of jobs are referred to as non-standard, atypical or precarious.

Informal employment thus comprises a large and diverse group of workers which can be divided into the more homogenous categories, informal self-employment and informal paid employment, according to status in employment[19]. Box 4.3 presents the conceptual framework developed by ILO.

Informal self-employment derives directly from the characteristics of the enterprise, or from the status in employment itself, and includes:

- employers working in their own informal sector enterprises
- own-account workers working in their own informal sector enterprises
- contributing family workers (irrespective of whether they work in informal or formal sector enterprises)
- members of informal producers' cooperatives (where they exist)
- own account workers engaged in the production of goods exclusively for own final use by their household (if considered employed).

Informal paid employment refers to employees holding informal jobs, employed by formal or informal enterprises or households. Employees are considered to have informal jobs if their employment relationship is, in law or in practice, not subject to national labour legislation, income taxation, social protection or entitlement to certain employment benefits (e.g. advance notice of dismissal, severance pay, paid annual or sick leave).

Box 4.3: Conceptual framework for informal employment

To arrive at a standard definition for informal employment, a conceptual framework was developed by the International Labour Organization in 2002*. Jobs are classified according to status in employment, an important classifying variable which helps identify the type of job and nature of employment, thus facilitating the identification of persons in informal employment.

The framework disaggregates total employment according to three dimensions: type of production unit (columns of the matrix), status in employment (rows of the matrix) and formal or informal nature of the job (cells of the matrix).

As can be seen from the diagram, contributing family workers are always in informal employment since they usually do not have explicit, written contracts and are not subject to labour legislation. Workers in other categories of self-employment (employers, own-account workers and members of producers' cooperatives), have informal jobs if they are engaged in informal sector enterprises and formal jobs if they are in formal sector enterprises: because of the independent nature of the employment, the characteristics of the job cannot be separated from those of the enterprise. Only employees, or persons in paid or wage employment, can be either in formal or informal employment: it will depend on whether their employment relationship is subject or not to national labour legislation, income taxation, social protection or entitlement to certain employment benefits.

Jobs by status in employment						
Status in employment	Production units by type					
	Formal sector enterprises		Informal sector enterprises		Households**	
Contributing family workers	IE		IE		-	
Employers	FE		IE		-	
Members of producers' cooperatives	FE		IE		-	
Own-account workers	FE		IE		IE	
Employees	IE	FE	IE	FE	IE	FE

IE (purple cells): Informal employment. FE: Formal employment. - : such jobs do not exist in the type of unit in question.

*

http://www.ilo.org/public/english/bureau/stat/download/guidelines/defempl.pdf

** **Households** refer to households producing goods exclusively for their own final use and households employing paid domestic workers.

[19] See end of section 4.2.4 for status in employment definitions.

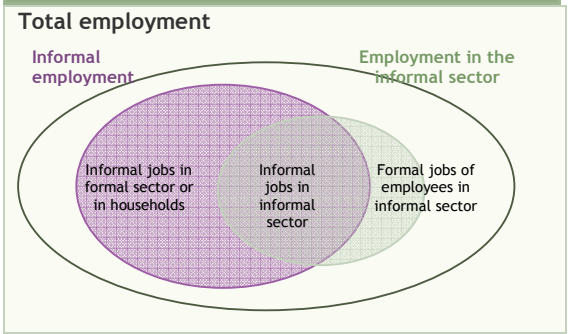
Informal paid employment is common among the following categories of employees, provided that their employment relationship fulfils the criteria specified in the definition of informal employment:

- employees of informal enterprises (although these may also be in formal employment, depending on their conditions of employment)
- casual or day labourers
- temporary or part-time workers
- paid domestic workers
- unregistered or undeclared workers
- industrial outworkers (also called home-workers).

As the term informal employment is a broad concept, users of statistics tend to fail to distinguish the informal employment and employment in the informal sector. The following diagram (Figure 4.1) shows how there is an overlap between informal employment (the purple oval) and employment in the informal sector (the green oval), but there can be informal jobs outside the informal sector as well as formal jobs within the informal sector, although these are less common. Some users of statistics sometimes use the notion of *employment in the informal economy* which corresponds to the sum of employment in the informal sector and informal employment outside of the informal sector (the intersection of the green and purple area).

Confusion may also arise with reference to the *non-observed economy*, which refers to the part of the economy difficult to measure, that is, to productive activities that may not be captured in the basic data sources used for national accounts compilation.

Figure 4.1



These, according to the OECD's handbook for measuring the non-observed economy (OECD, 2002) include:

- *underground production*, i.e. legal activities which are concealed from public authorities to avoid paying taxes or social security contributions (sometimes referred to as "hidden economy" or "black economy")
- *illegal production*, such as drug dealing, prostitution, smuggling of goods, which may or may not be included in statistical or fiscal reporting
- *informal sector production*, i.e. activities of the informal sector which are legal but are based on unofficial relationships and may not be registered because of their small scale in production
- *production of households for own final use* which results in goods or services which are consumed or capitalised by the households that produced them.

Obviously, there is an overlap between the informal sector and the non-observed economy, since there are non-observed activities which are not within the informal sector as well as activities of the informal sector which are not within the non-observed economy (UNECE, 2008e). For example, a household that lets a room to tourists or a teaching assistant may be part of the informal sector but observed. Street traders or taxi-drivers may be both not observed (i.e. not measured in the official statistics) and informal, although the situation will be different depending on the country.

In practice, it may not always be easy to draw a clear line between underground, informal and illegal activities. Nevertheless, it is widely known that in developing and transition countries, most informal sector activities are neither underground nor illegal, as they represent simply a survival strategy for the persons involved in them and for their households. This facilitates the conduct of surveys on the informal sector in these countries (Hussmanns, 2003).

4.3.2 Why it is important

Informal jobs, within and outside informal sector enterprises, are an important source of employment and a main contributor to economic growth in many developing countries. Whether

stemming from traditional forms of production or as a result of market globalization, informal employment in these countries constitutes a primary source of livelihood for many people. It can also represent an important source of entrepreneurial potential and of on-the-job skills acquisition in places with limited educational alternatives (ILO, 2002a, ILO 2002b).

Informal employment is also becoming important in countries in transition from a centrally planned to a market economy. Under the centrally-planned economy, informal activities were considered illegal and even forbidden. Now in countries of Central and Eastern Europe (CEE) and the Commonwealth of Independent States (CIS) such activities increasingly have a role in creating jobs, in providing income, and in the production of goods and services.

Despite the positive role of informal employment in job creation, income generation and economic growth, in most cases, it represents a survival strategy in the face of inadequate job opportunities in the formal sector; of social safety nets such as unemployment insurance and pensions; and of pervasive low wages, primarily in the public sector. Because workers in informal employment are not covered or insufficiently covered by formal labour arrangements, they lack protection, rights and representation. As a result, these workers experience varying degrees of vulnerability and often remain trapped in poverty.

While informal employment represents an important source of employment for both women and men in developing and transition countries, this is particularly the case for women. Indeed,

- informal employment is generally a larger source of employment for women than formal employment (ILO, 2002a)
- in most developing countries it is a larger source of employment for women than for men (ILO, 2002a)
- women are concentrated in the more precarious types of informal employment (Chen et al. 2005)
- average earnings from these types of informal employment are low and not sufficient in the absence of other sources of income to raise households out of poverty (Chen et al., 2005).

In developed countries, employment arrangements which are consistent with the concept of informal employment are also important and even growing in importance. Own-account self employment, part-time and temporary paid employment – including fixed term, contract, casual, seasonal and on-call work and work through a temporary agency are more typically classified as non-standard employment because they differ from the full-time, full year job with benefits and labour and social protection. Depending on the entitlement benefits associated with these types of jobs, they could also be considered as informal employment. Again, these arrangements are a more important source of employment for women than for men. For example, in many OECD countries there are more women than men in part-time employment (both wage and self-employment) and in temporary jobs. The so-called flexibility of these jobs is often viewed positively, especially for women, since it allows them to combine paid work with unpaid family responsibilities. There is some evidence based on data for Canada that an earnings penalty is associated with these jobs and that this penalty is greater for women than for men. The fact that a job is part-time does not in itself prove that it is an informal job. There can be part-time jobs with entitlements to standard (or prorated) benefits such as social security, annual leave, sick leave, etc., The concept of flexicurity can be mentioned In this context, that is, a combination of flexible labour markets and a high level of employment and income security, promoted by the European Employment Strategy.[20]

4.3.3. The value-added of statistics

Detailed statistics on employment in the informal sector and informal employment are important to measure adequately the contributions of all workers and all sectors to the economy. They are also essential to improve the measurement of women's participation in the labour market and of gender equality in employment. Furthermore, data disaggregated by informal and formal employment within status in employment categories and branch of economic activity can provide new information on the differences in employment conditions and occupational distribution (i.e. concentration) of women and men in the labour market.

In Moldova, for example, the 2003 Labour Force Survey showed that 38 per cent of the total

[20] http://ec.europa.eu/social/main.jsp?catId=116&langId=en

employed population was in informal employment with roughly similar proportions of employed women and men in these jobs (39 per cent for women in contrast to 38 per cent men) (see ILO & RoM, 2004). However underlying the similarities in general rates are very different types of work. When each of the standard classifications of economic activity are disaggregated by sex and formal/informal employment, new information is revealed about the highly gendered nature of work. The Moldova data show that while men are more often than women engaged in agriculture, forestry and fishing, men predominate in formal employment in this branch of economic activity while women are in informal employment. Further, disaggregation showed that as much as 80 per cent of women's employment in the informal sector is in the traditional branches of agriculture, forestry and fishing rather than the potentially more lucrative branches of economic activity. Women's economic activity tends to be in the small subsidiary plots (which are not registered as agricultural holdings) of households, on which they produce agricultural goods wholly or partly for the market.

The general category paid employment also conceals important differences in the quality of employment for women and men. An ILO study in five countries of Eastern Europe found that women tend to be disproportionately represented in flexible working arrangements such as part time work (often involuntary) and employment on fixed term contracts (Caze & Mesporova, 2003). These types of employment are generally connected with lower quality employment and insecurity since they typically do not carry adequate social protection.

In addition to making visible the gendered nature of employment, detailed statistics on informal employment and informal sector employment can be used in the design of evidence- based policies aimed at improving the employment situation of women and men, including their employment conditions, legal and social protection, as well as access to training and to such economic resources as credit and microfinance. In addition, such statistics can also inform policy aimed at increasing the productivity of informal economic activities; organizing informal workers; and implementing appropriate regulatory frameworks, governmental reforms, urban and rural development schemes, and so on. Because of the linkages between informal employment, vulnerability and poverty, detailed informal employment statistics should also be used to inform poverty reduction strategies and programmes.

Finally, detailed statistics on informal employment can be used to support the Millennium Development Goals (MDGs) monitoring process. Informal employment is a key category specified in a background indicator "gender differences in the structure of employment" recommended by the Gender Indicators Sub-group of the Inter-Agency and Expert Group on the MDGs for monitoring progress in achieving women's equality and empowerment, the goal of MDG 3. This indicator presents data on the employment of women and men in the agricultural and non-agricultural sectors, formal and informal employment and in the various statuses in employment categories separately (see Box 4.4 for presentation of indicator).

This broader indicator was considered necessary given problems in interpreting the employment indicator for MDG 3, non-agricultural wage employment.

In many developing countries, non-agricultural wage employment is only a small percentage of total employment. Moreover, it includes various types of employment which vary in terms of earnings, social protection and security. These features underlying the indicator make it difficult to interpret any change in women's share of non-agricultural wage employment as progress or lack thereof. The more detailed and comprehensive information provided by the background indicator "gender differences in the structure of employment" will facilitate monitoring whether progress is being made.

4.3.4. Implications for data collection

More and more countries are collecting data on informal employment, within and outside the informal sector. Among these are several countries in transition which for the first time are undertaking Labour Force Surveys. Even when a country has not specified informal sector employment and informal employment as objectives in a data collection effort, it may be possible to produce basic tabulations on these variables, provided appropriate questions for their measurement have been included in the survey questionnaire

Box 4.4: Background indicator for MDG # 3: Promote gender equality and empower women

Gender differences in the structure of employment

Row		Women	Men
0	Share in total employment (Both sexes = 100.0 %)	%	%
1	**Total Employment**	100.0%	100.0%
2	**Agricultural Employment**	%	%
2.1	Own-account workers, employers & members of producers' cooperatives	%	%
2.2	Contributing family workers (informal)	%	%
2.3	Employees	%	%
	2.3.1 Formal	%	%
	2.3.2 Informal	%	%
3	**Non-Agricultural Employment**	%	%
3.1	Own-account workers, employers & members of producers' cooperatives	%	%
	3.1.1 Formal	%	%
	3.1.2 Informal	%	%
3.2	Contributing family workers (informal)	%	%
3.3	Non-domestic employees	%	%
	3.3.1 Formal	%	%
	3.3.2 Informal	%	%
3.4	Domestic employees	%	%
	3.4.1 Formal	%	%
	3.4.2 Informal	%	%
3.I	Formal Non-Agricultural Employment (3.1.1 + 3.3.1 + 3.4.1)	%	%
3.II	Informal Non-Agricultural Employment (3.1.2 + 3.2 + 3.3.2 + 3.4.2)	%	%

Note: This indicator, proposed by the ILO in consultation with Women in Informal Employment: Globalizing and Organizing (WIEGO), has been recommended by the Sub-Group on Gender Indicators of the Inter-Agency and Expert Group on MDG Indicators for use by countries in monitoring progress towards MDG#3.

Questions for capturing employment in the informal sector should focus on the characteristics of the enterprise where the person works. If there are questions on size of enterprise, legal ownership, type of accounts and on whether the enterprise is registered, statistics on employment in the informal sector may be prepared. On the other hand, questions for identifying persons in informal employment should concentrate on the type of job. We have seen that once status in employment and type of production unit are known, only the informal jobs of employees still need to be identified with additional questions (e.g. we know already that all self-employed in informal sector enterprises are in informal employment). If there are questions asked to all employees on social protection or other employment benefits - specifically the payment of social security contributions or the existence of paid leave informal employment can be distinguished from formal

There is a need to conduct further studies to determine how to best apply the concept of informal employment to developed countries. For these countries, data are generally collected on types of work that are commonly found in the informal economy, such as part-time, temporary and own-account work. However, data collection and the standard tabulations often do not allow to distinguish these arrangements as formal and informal employment, especially in the context of flexicurity (see 4.3.2).

It is preferable, of course, if data on informal employment and employment in the informal sector are collected as part of an overall strategy on the production of labour and economic statistics. Guidelines for this are found in an ILO Department of Statistics Working Paper, *Measuring the informal economy: from employment in the informal sector to informal employment* (Hussmanns, 2005). Currently a manual on Surveys of Informal Employment and Informal Sector is being prepared. The ILO Department of Statistics Working Paper, *Employment in the informal economy in the Republic of Moldova* (ILO, 2004) provides information on both the questions used in the Moldova Labour Force Survey as from 2003 as well as a statistical annex on the results (see Box 4.5).

In tabulation and analysis, informal and formal employment can be used as broad categories for presenting all major classifications of economic

activity. For example, all tables in the Moldova report referenced above are presented using formal and informal employment and sex as basic categories of disaggregation, including branch of economic activity, occupation, status in employment. Further, additional tables are disaggregated by type of unit: formal sector enterprises, informal sector enterprises and households.

Box 4.5: Questions relating to informal employment and informal sector: Moldova Labour Force Survey as from 2003

For the identification and description of production units (enterprises) considered as belonging to the **informal sector** the following additional questions were introduced in the LFS questionnaire:

a) *Legal organization of the enterprise*, in which the interviewed person was employed:

- Enterprise, organization, institution (with the status of a legal person)
- Individual agricultural enterprise
- Individual enterprise or partnership (without status of a legal person)
- Individual work activity (own-account worker)
- Private household
- Does not know.

b) *Registration of the enterprise*:

- Registered
- In the process of registration
- Not registered
- Does not know.

c) *Size of the establishment* (number of persons engaged):

- 1-4
- 5-9
- If less than 10: Exact number of persons engaged in the establishment.
- 10-19
- 20-49
- 50-99
- 100-199
- 200 and more
- Does not know.

d) *Kind of work place*:

- Home of the interviewed person
- Enterprise, plant, factory, office, shop, workshop, etc. separate from the person's home
- Farm or agricultural land
- Client's or employer's house
- Construction site
- Market or street stall
- Without fixed location
- Other (specify).

Only questions a) and b) were used to **define** employment in the informal sector.

All of these questions were asked in respect of the respondents' main activities as well as secondary activities. These questions were addressed to all employed persons except household producers of agricultural goods. For producers of agricultural goods exclusively for own consumption by their household a question was added on the number of hours worked in this activity during the survey reference week. Persons who had worked less than 20 hours in the production of agricultural goods exclusively for own consumption by their household, were not considered as being employed.

Regarding the identification of employees in **informal employment** the following additional questions were introduced in the LFS questionnaire for testing:

1. *Type of employment contract or agreement* (written; oral)
2. *Payment by the employer of social contributions for the employee* (yes; certainly; possibly; no; does not know)
3. Possibility to benefit from *paid annual leave* (yes; no; does not know)
4. Possibility to benefit from *paid sick leave in case of illness* (yes; no; does not know)
5. Possibility to benefit from *maternity leave in case of birth of a child* (yes, certainly; possibly; no; does not know; not applicable);

Only questions 2, 3 and 4 were used to **define** informal paid employment.

A question on the permanency of the job (permanent vs. temporary job) had already been included in the LFS questionnaire prior to 2003.

These questions were only addressed to employees. (As from 2004, all the questions were asked in respect of the main **and** the secondary job.)

In addition, a probing question referring to the most common types of informal activities in the Republic of Moldova was included among the lead survey questions to identify persons employed during the survey reference week and on the engagement in secondary activities. This was because persons could only be classified as being employed in the informal sector or in informal jobs, if they had been identified as employed persons in the first place. Unless such a probing question had been included in the survey questionnaire, there would have been a risk of informal activities not being reported by respondents as employment.

4.4 Unpaid work

4.4.1 What it is

Labour statistics capture only one part of the work life of women and men (see section 4.1). A range of non-remunerated productive activities in the home and community - although included as productive in the General Production Boundary of the System of National Accounts 2008 (UNSD, 2009a) but not included in the SNA production boundary due to measurement as well as conceptual limitations - have great importance for the well-being of families and communities, and for the overall production of the economy. Collectively referred to as *unpaid work*, these activities can be broadly grouped into two main categories:

Unpaid household service work refers to domestic or personal services provided by unpaid household members, some examples of which can be seen in Box 4.1, Section 4.1 in the list of unpaid activities **excluded** from the definition of economic activity as set forth by the SNA production boundary. They include such activities as housework, cooking, and caring for children, old or sick people, household accounting and management.

Volunteer work refers to "activities or work that some people willingly do without pay to promote a cause or help someone outside of their household or immediate family" (ILO 2008b). Volunteer work encompasses a great diversity of activities. Again, Box 4.1 in Section 4.1 includes some examples. Other examples include:

- work to help someone in need (like children, the elderly, the poor, or disaster victims)
- work to clean or improve one's community (like roads, schools, health facilities, the water supply, or parks)
- organizing an event, such as a community gathering, a sporting or cultural activity, a political rally, or a religious celebration
- work to publicize an issue, or to make people aware of a problem, or
- work for an organization that serves communities such as a school, library, health care centre, NGO, club, union, church, or association (e.g. serving on boards, fundraising, office and administrative work, gathering scientific data, coaching or officiating, counselling, providing free medical care or legal advice, preparing and serving food, transporting persons or goods). (ILO 2008b)

Central to the concept of unpaid household service and volunteer work is the "third person criterion". According to this criterion, activities outside of the SNA production boundary but within the general production boundary that constitute unpaid household service and volunteer work are distinguished from activities that are not productive by the fact that they can be performed by someone else (a third person) without diminishing their indirect utility. As such, personal leisure activities such as watching television or playing a sport and other basic human activities such as eating, studying or sleeping cannot be performed by someone else and are excluded from the scope of unpaid work because they are not considered productive. Indeed the latter activities are referred to as non-productive activities.

4.4.2 Why it is important

World-wide, women tend to be employed for fewer hours in employment than men, even in places where women's labour force participation rates are similar to those of men. This pattern is largely a result of the fact that women tend to have more domestic roles and responsibilities than men. In particular, women tend to perform the bulk of the unpaid care work, spending in general more time on unpaid work than on employment, while it is the opposite for men. However, because the SNA places these activities outside of its production boundary, they are excluded from the scope of employment statistics. As a result, a significant component of women's work remains invisible and their full contribution to the economy is often undervalued in national accounts. In many countries, women work on average more than men, once unpaid work is taken into account.

Currently, only volunteer work that leads to the production of goods and services for market enterprises or for non-profit enterprises receiving fees is considered within the scope of the SNA production boundary. This results in the exclusion from employment measures of a broad range of productive activities performed by women and men on a voluntary basis. Little effort has gone into measurement of these despite the enormous scale of such work and the contributions they make to the economy and to the quality of life in countries everywhere (far more significant than currently recognized).

Box 4.6: Beijing Platform for Action

Strategic Objective H3.
Generate and disseminate gender-disaggregated data and information for planning and evaluation

Actions to be taken

206. By national, regional and international statistical services and relevant governmental and United Nations agencies, in cooperation with research and documentation organizations, in their respective areas of responsibility:

e. Improve data collection on the full contribution of women and men to the economy, including their participation in the informal sector(s)

f. Develop a more comprehensive knowledge of all forms of work and employment by:

i. Improving data collection on the unremunerated work which is already included in the United Nations System of National Accounts, such as in agriculture, particularly subsistence agriculture, and other types of non-market production activities

ii. Improving measurements that at present underestimate women's unemployment and underemployment in the labour market

iii. Developing methods, in the appropriate forums, for assessing the value, in quantitative terms, of unremunerated work that is outside national accounts, such as caring for dependants and preparing food, for possible reflection in satellite or other official accounts that may be produced separately from but are consistent with core national accounts, with a view to recognizing the economic contribution of women and making visible the unequal distribution of remunerated and unremunerated work between women and men.

h) Develop an international classification of activities for time-use statistics that is sensitive to the differences between women and men in remunerated and unremunerated work, and collect data disaggregated by sex. At the national level, subject to national constraints:

i. Conduct regular time-use studies to measure, in quantitative terms, unremunerated work, including recording those activities that are performed simultaneously with remunerated or other unremunerated activities

ii. Measure, in quantitative terms, unremunerated work that is outside national accounts, work to improve methods to assess its value, and accurately reflect its value in satellite or other official accounts which are separate from, but consistent with core national accounts.

Volunteer work also provides employment training, offers pathways into the labour force, delivers health services, builds social capital and offers a sense of self-fulfilment to the volunteers themselves (ILO 2008b).

4.4.3 The value-added of statistics

Measuring unpaid work was one of the major challenges to governments that came out of the United Nations Third World Conference on Women in Nairobi in 1985 as well as the United Nations Fourth World Conference on Women in Beijing in 1995.

The Beijing Platform for Action calls for national and international statistical organizations to improve data collection on the full contribution of women and men to the economy, which can be better quantified by measuring unpaid work disaggregated by sex and by reflecting its value in satellite accounts to the GDP, as suggested by the SNA (see point f) iii) in Box 4.6).

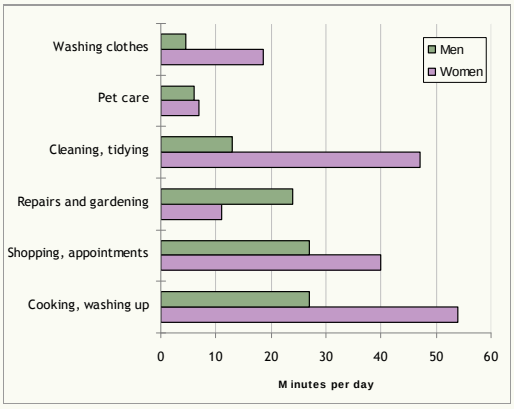
The methodological proposal (EC 2003) by Eurostat on household satellite accounts is a contribution to international efforts to measure unpaid work. The proposal aims to achieve the harmonization of methodologies and to improve concepts on the productive activities carried out by households.

The sheer extent of the unpaid work can be well demonstrated by looking at its value to the countries' GDPs For example, the ratio of the value of unpaid work to Australia's GDP in 1997 ranged from 43% to 62% depending on the valuation method used, with the female contribution to the value of unpaid household work being around 65% (ABS 2000). According to Statistics Estonia, the value of unpaid work in Estonia in 1999-2000 ranged from 27% to 58% of GDP (Statistics Estonia 2006). In Korea in 1999 it ranged between 30% and 53% of GDP[21].

Box 4.7 shows an example, based on the United Kingdom's Time Use Survey, of how much time women and men spend on different types of unpaid domestic work.

[21] ESCAP, Time-use data and valuation of unpaid work - Measuring the value of unpaid work, in *Integrating Unpaid Work into National Policies*, UN New York 2003.

Box 4.7: Time spent on housework by sex, Great Britain 2005



Women in Great Britain spent more time on shopping and other domestic work in 2005 than on paid work, 228 minutes and 146 minutes per day respectively. In comparison, men spent more time on paid work (225 minutes) than on domestic work (129 minutes). If paid work and domestic work are combined, women still spent 20 minutes more on average per day on work than men. As can be seen from the figure, women spent more time than men cooking and washing up, cleaning and tidying, washing clothes and shopping (159 minutes compared with 71 minutes per day for men). Men spent more time performing repairs and gardening (23 minutes compared with 11 minutes per day for women).

Source: Office for National Statistics, UK (2005) *Time Use Survey 2005 (collected on the NS Omnibus survey).*

Box 4.8: 2006 Population and Housing Census, Canada

Remember, these questions are only for persons aged 15 and over.

HOUSEHOLD ACTIVITIES

Note:
Last week refers to Sunday, May 7, to Saturday, May 13, 2006.
In Question 33, report all time spent on each activity, even if two or more activities took place at the same time.
Visit www.census2006.ca or call 1 877 594-2006 for more information.

FOR INFORMATION ONLY

33 **Last week**, how many hours did this person spend doing the following activities:

(a) doing **unpaid** housework, yard work or home maintenance for members of this household, or others? *Some examples include: preparing meals, washing the car, doing laundry, cutting the grass, shopping, household planning, etc.*	○ None ○ Less than 5 hours ○ 5 to 14 hours ○ 15 to 29 hours ○ 30 to 59 hours ○ 60 hours or more	○ None ○ Less than 5 hours ○ 5 to 14 hours ○ 15 to 29 hours ○ 30 to 59 hours ○ 60 hours or more
(b) looking after one or more of this person's own children, or the children of others, **without pay**? *Some examples include: bathing or playing with young children, driving children to sports activities or helping them with homework, talking with teens about their problems, etc.*	○ None ○ Less than 5 hours ○ 5 to 14 hours ○ 15 to 29 hours ○ 30 to 59 hours ○ 60 hours or more	○ None ○ Less than 5 hours ○ 5 to 14 hours ○ 15 to 29 hours ○ 30 to 59 hours ○ 60 hours or more
(c) providing **unpaid** care or assistance to one or more seniors? *Some examples include: providing personal care to a senior family member, visiting seniors, talking with them on the telephone, helping them with shopping, banking or with taking medication, etc.*	○ None ○ Less than 5 hours ○ 5 to 9 hours ○ 10 to 19 hours ○ 20 hours or more	○ None ○ Less than 5 hours ○ 5 to 9 hours ○ 10 to 19 hours ○ 20 hours or more

4.4.4 Implications for data collection

The major source of data used to shed light on women's and men's participation in unpaid work is a Time Use Survey, which has been described in detail in chapter 3, section 4. Time use data are uniquely able to measure comprehensively the different activities of women and men. This approach helps to bypass the economic/non-economic dichotomy imposed by national accounting.

Because of the relatively resource-intensive nature of Time Use Surveys, they will, at best, only be done at about five-yearly intervals. In interim years or where the implementation of a time-use survey is not feasible, data may also be collected by a series of questions added to a census or a Labour Force Survey. For example, since 1996 the Canadian Census had included a few questions about unpaid work; in particular, time spent caring for children and elders and time spent on unpaid domestic work (see Box 4.8).

To measure volunteer work, the ILO recommends adding a specific supplement to national Labour Force Surveys on a periodic basis: the Recommended Core Survey *Manual on Volunteer Work (ILO 2008a)*. The Module is included in the Annex to the ILO publication.

The suggested items are considered the minimum needed to be able to portray the economic scale of volunteer work and to integrate volunteer work into the satellite accounts on non-profit institutions, as called for by the United Nations.

Within the Recommended Module, respondents are asked to identify any activity in which they have engaged over a specified recall period that fits the definition of volunteer work cited above. They are then asked for each such activity in turn a series of questions about the frequency, amount of time, type of work, and whether the activity was done for (or though) an organization, specifying its field of work. The term "volunteer work" itself is not used, since this may be interpreted differently in different contexts, while examples of volunteer activities are given. The reference period to recall volunteer activities is recommended to be four weeks, if the module is conducted once a year or less, with an additional prompt to capture activities done only once or twice a year. It can be shorter if included regularly in continuous Labour Force Surveys. Responses on type of work are to be coded according to the International Standard Classification of Occupations, in order to help in the construction of satellite accounts, while organizations' field of work are to be coded by industry, using the International Standard Industrial Classification of All Economic Activities.

4.5 Reconciliation of work and family life

4.5.1 What it is

Reconciliation of work and family life is a term often used in the context of employment policies which have the aim of helping workers combine paid work and unpaid care responsibilities, especially women who may otherwise not be able to participate fully in the labour force. It also may refer to the relationship between different activities and the time devoted to them, relating not only to work and the family but including social life, personal development and civic participation (European Foundation for the Improvement of Living and Working Conditions, 2006), or activities which may fulfil the need to relax or exercise. Furthermore, bearing the co-responsibility for sharing the demands of family life within the household is an important element in the balance between the various aspects of life of an individual.

4.5.2 Why it is important

As yet, the concept of co-responsibility within households for unpaid household service work (that includes caring for children) is far from widely implemented. Women are most often faced with difficulties to balance paid work time, family time (burden vs. co-responsibility) and free time. This family time is therefore a major constraint on women's participation in the labour force, since it is women who do most of the unpaid care work. While women's employment rates are generally lower than men's, the extent and form of their participation is highly connected to their marital status and on whether they have small children or other persons requiring care in their households. This is not the case for men. In fact, in most of Europe, women without children have higher employment rates than women with children, while the opposite is true for men (Eurostat 2005b).

The increasing labour market participation of women, as well as changing family forms and an ageing population have made the reconciliation between work and family life one of the major topics on the European social agenda (ibid). Lack

of institutional arrangements such as childcare services, leave facilities and stable labour contracts are an obstacle for women to participate fully in the labour market. "Enabling women and men to reconcile work and family life" was one of the EU gender policy objectives on employment indicated in the 2002 Employment Guidelines adopted by the Council, to be taken into account in the employment policies of the Member States. The objectives under this guideline were:

- *Adopting family-friendly policies (including care services and parental and other leave schemes)*
- *Increasing the availability of care services for children and other dependants (setting a national target)*
- *Facilitate the return of women and men to the paid workforce after an absence (e.g. facilitate access to training and upgrading of skills).*

The European Foundation for the Improvement of Living and Working Conditions' report also indicates that career breaks, part-time work and flexible working arrangements are of particular importance for women and men reconciling work and family life and that an equal sharing of family responsibilities is crucial in this aspect.

Similar objectives were included in the 2003 Employment Guidelines, and more recently both the 2005-2008 and 2008-2010 Guidelines include promotion of "a lifecycle approach to work" through (among others) a *better reconciliation of work and private life and the provision of accessible and affordable childcare facilities and care for other dependants.* They recommend securing childcare for at least 90 % of children between three years old and the mandatory school age, and at least 33 % of children under three years of age by 2010, and providing measures to support families in order to increase the average employment rate of parents (following the Barcelona targets adopted by the EU in 2002).[22]

Different types of policy initiatives which promote such reconciliation have been implemented in Europe. Not only childcare services, but also leave facilities (such as parental leave, career breaks or reduction in working time), flexible working arrangements (such as part time, flexitime, telework, homework, job sharing), or financial allowances for working parents - although these are often in place to reduce income inequality rather than to promote co-responsibility and reconciliation between family and work. Furthermore, parental leave while in theory supporting the reproductive role of women in particular and of parents generally, does not always favour gender equality. It is usually women who take up parental leave as it is mostly women who work part-time. Furthermore, long periods away from work contribute to reducing female participation in employment as well as damaging future career paths and earnings.

4.5.3 The value-added of statistics

In order to shed light on how women and men balance their working life with other obligations in the family and to design and evaluate policies aimed at promoting reconciliation, detailed statistics are needed on participation in and characteristics of employment and unpaid care work, and the time devoted to these and other aspects of life (see Box 4.9 for an example from Canada). It is also important to establish how far persons participate in the labour force as they would wish, and where they are unable to do so, whether the reasons are connected with a lack of suitable care services for children and dependant persons or other family-related reasons (Eurostat, 2007b). Statistics are called for by European institutions on the availability and use of services and arrangements which may promote reconciliation, in particular on childcare provision as well as elderly care facilities. Furthermore, information on the different strategies used to balance work, family life and free time, and the personal satisfaction or perceived quality of life connected to these, may provide a more complete and multi-faceted picture of the issue.

4.5.4 Implications for data collection

Labour Force Surveys provide basic data on economic activity status and employment characteristics, working time, including reasons for working part-time, together with demographic characteristics and household composition, which are one component of the balance between work and family life, but alone are not sufficient.

[22] For information on the new Common Objectives from 2006, see http://ec.europa.eu/social/main.jsp?catId=755&langId=en.

Box 4.9: Time spent on paid and unpaid work by men and women in Canada

Time spent on paid and unpaid work by men and women in Canada 1986 and 2005

A comparison of data from time-use surveys carried out in 1986 and 2005 by Statistics Canada showed that women, in general, do most of the housework and tend to feel more time-stressed than men do. However, things appear to be changing in recent times. Now more men are juggling household chores and paid work duties, while women are spending more time at the office. As a result, the gap between men and women in the division of labour is still there, but it is slowly getting narrower, as can be seen from the graph.

On the work-life balance, Statistics Canada notes that in couples where both partners work full-time and who have dependent children at home, only 52% of women felt satisfied with their work-life balance. In contrast, 71% of their male counterparts were satisfied. This suggests that women face more challenges in finding the right balance between work and family, especially because of the heavier burden posed on their shoulders in terms of household-related tasks.

Source: Statistics Canada, 2006 (http://www.statcan.gc.ca/daily-quotidien/060719/dq060719b-eng.htm)

Box 4.10: Specifications of the 2005 ad hoc module on reconciliation between work and family life included in Labour Force Surveys in the EU

- Main type of childcare used for own/spouse's children up to 14 while person is working (apart from compulsory school; normal week omitting school holidays and emergency arrangements)
- Person takes regularly care of other children up to 14 or of ill, disabled, elderly relatives/friends aged 15 or more in need of care
- Wish to change the organization of his/her working life and his/her care responsibilities
- Main reason (linked with childcare) for not working or not working more
- During school holidays or when the usual childcare services are closed or when the carer is on holidays: Person took days off or reduced the number of hours worked or took other special arrangements at work over the last 12 months to care for the children
- Main reason (linked with care of ill, disabled, elderly relatives/ friends aged 15 or more in need of care) for not working or not working more
- Possible to vary start or/and end of working day for family reasons (at least one hour)
- Possible to organise working time in order to take whole days off for family reasons (without using holidays and special leave)
- Time off from work taken over the last 12 months for family sickness or emergencies (without using holidays)
- Parental leave taken over the last 12 months for own children living in the household
- Main reason for not having taken parental leave for own children living in the household over the last 12 months

See Source for available multiple choice responses to each question.

Source: European Commission (2004).

To provide data on the reconciliation of work and family life, the European Union developed an "ad hoc" module to be included in Labour Force Surveys across the EU countries in the 2nd quarter of 2005. It was asked of persons aged 15-64 with a child aged under 15 living with them. The module established the type of childcare used, if any and whether the person voluntarily took care of ill, disabled, elderly relatives or friends aged 15 or over. Such persons were asked whether they would like to change the organization of their working life and care responsibilities, by reducing or increasing caring time. The person interviewed was then asked further questions in relation to reasons for not working or not working more, availability of flexible work practices, and use of special and parental leave (see Box 4.10).

The other essential component of reconciliation of work and family life is unpaid household service and volunteer work: the major source of data used to shed light on women's and men's participation in this kind of work is Time Use Surveys, which have been described in detail in chapter 3, section 4. Using this source it is possible to analyze the relationship between unpaid work and labour force participation of

Box 4.11: Specific questions on reconciliation of work and family life in the Italian Time Use Survey

Time Use Surveys are carried out in Italy every five years. For the 2002-2003 edition, the Department for Equal Opportunities requested the National Statistical Office (Istat) to insert an ad hoc module on the reconciliation of work and family life in the individual questionnaire. This included questions on the following:

- Full-time or part-time job
- Type of part-time work (reduced work hours every day or fewer days/weeks /months)
- Reasons for having chosen a part-time job
- Reasons for not wanting or for not being able to work full time
- Availability of full-time workers to work: part-time; in shifts; in the evening; at nights; on Saturdays; on Sundays
- Main need whereby work hours are organised
- On what type of family need are work hours organised
- Interest in working at home (telework)
- Reasons for working or for wanting to work at home (telework)
- Use of (mandatory) maternity/ paternity leave
- Number of days of maternity/ paternity leave
- Main remuneration during maternity/paternity leave
- Use of daily paid work leaves ("breastfeeding leaves") following the birth of a child
- Use of (optional) parental leave
- Number of days taken for parental leave
- Main remuneration during parental leave
- Reasons for not having benefited of parental leave
- Use during the past 12 months of a leave to care for a sick child
- Number of days of work leave taken to care for a sick child during the past 12 months

Other questions already included in the questionnaire address the relationship and overlap between work and family life, complementing the data on time use: employed persons are asked whether they spend their working time with other family members, whether they work outside their usual workplace or usual working hours (at home, in the free time, during holidays etc.), the frequency with which this happens and the reasons for it.

Source: ISTAT (2007) *and* Time use questionnaire, 2002-2003 http://www.istat.it/strumenti/rispondenti/indagini/famiglia_societa/usodeltempo/2002_2003/

various household members, as well as the division of labour and sharing of tasks inside the household. Sequences of work episodes and how they interact with other activities can also be studied. Time that is connected with work, such as time spent commuting between work and home when no productive activity for the job is performed, which is excluded from estimates of working time, is more accurately represented through the diaries used in Time Use Surveys, rather than through labour force survey questionnaires. This can and should be taken into account from the perspective of a balanced life.[23]

In some time-use surveys interviewees are also asked about how satisfied they are with the use of their time, how they perceive their quality of life, and whether they experience any feelings of time stress. This can be related to the actual distribution of time between different activities connected with work, family and free time.

Box 4.11 gives an example of how some questions specific to the reconciliation of work and family life were introduced in the Italian Time-Use Survey, complementing the data on time use.

Finally, a source which may be useful is the EU Survey on Income and Living Conditions (EU-SILC), conducted on an annual basis, which provides information on the use of different child care arrangements, including informal ones (e.g. grandmothers or nannies).

Also, data on number of children in early childhood care and on children enrolled in pre-primary education, in order to monitor the Barcelona targets for childcare, are generally obtainable from administrative sources. It should be kept in mind that sometimes data on childcare are not easily comparable across countries due to the fact that each country has its own combination of childcare arrangements (such as day care centres, family-type care, child-minders at home, pre-school education). In some cases, non-enrolment may be due to preferences for other informal types of care at home, and not necessarily on availability, so data on use of formal childcare facilities should be analyzed in combination with survey-type data on reasons for use or not use, including affordability and availability of paid leave.

Some data which may be useful to complete the picture on reconciliation of work and family life is still lacking. For example, the quality of childcare plays an important role in the decision

[23] M.C. Romano, *Reconciliation of work and family: the additional value of Time Use data.*

on whether to use childcare services or not. Indicators on group size, the ratio of children to carers and their qualification may be useful. Also, more information is needed on take up of parental leave by women and men and the consequences, to calculate for example a return rate of leave takers to work. Statistics on legal provisions to request or switch between part-time and full-time work may shed light on the extent of flexibility that women have when deciding to enter or leave full employment (European Commission 2005a).

4.6 Entrepreneurship

4.6.1 What it is

There is no commonly accepted definition of entrepreneurship or entrepreneur and there are different understandings of the phenomenon. The OECD has proposed a definition based on the most important characteristics generally agreed upon by scholars, in order to facilitate measurement and the design of valid indicators which can be compared across countries. According to this definition, *entrepreneurship* is the phenomena associated with *entrepreneurial activity*, which is "the enterprising human action in pursuit of the generation of value through the creation or expansion of economic activity, by identifying and exploiting new products, processes or markets". *Entrepreneurs* are those "persons (business owners) who seek to generate value through the creation or expansion of economic activity, by identifying and exploiting new products, processes or markets (Ahmad & Seymour, 2008).

Definitions used by countries to collect and or disseminate data on women's and men's entrepreneurship include concepts such as ***owners, managers, self-employed, and employers***. However, different approaches are often used when these concepts are defined and put into the context of entrepreneurship, as different countries pursue different objectives through the measurement of entrepreneurship, but these should be made explicit.

The owner or manager of an enterprise, its executive director, or a member of its managing board is usually considered entrepreneur. Self-employed people are also commonly considered to be entrepreneurs, but not all data sources include self-employment in their definition of entrepreneurship. Self-employment itself can be defined in multiple ways according to the different goals of various sources. For example, not all countries in the UNECE region use the standard guidelines of the International Labour Organization (ILO) for defining self-employment (see status in employment categories in section 4.1).

4.6.2 Why it is important

Entrepreneurship is an important factor in the national economy for creating and increasing employment opportunities and fuelling economic growth and innovation (OECD, 2006a). Entrepreneurship is viewed as a critical activity to regenerate and sustain economic growth in strong economies and also as a means of boosting employment and productivity in deprived regions or in developing countries, as it is an important source of job creation, career opportunities and poverty reduction for both men and women.

According to the Global Entrepreneurship Monitor Report on Women and Entrepreneurship (Allen et al., 2006),[24] regardless of country, men are more likely to be involved in entrepreneurial

activity than women, and this gender gap is greatest in the high-income country group. Examination of entrepreneurial behaviour across the globe yields a clear picture of a gender gap in venture creation and ownership activity (Box 4.12 describes the situation in some transition countries).

A significant gender gap exists for both early stage entrepreneurial participation and established business ownership. Women's business is mainly concentrated in the areas of small-scale entrepreneurship, which primarily includes retail and service.

In the Beijing Platform for Action, one of the means of improving women's employability, in the context of increasing flexibilities in labour markets, is fostering women's access to self-employment and entrepreneurship. However, policies aimed at supporting entrepreneurship development tend to be gender neutral.

[24] The Global Entrepreneurship Monitor (GEM) conducts a harmonized annual assessment of the national level of entrepreneurial activity across an increasing number of countries (54 in 2009). It produces reports on three special topics: High Growth/High Expectation Entrepreneurship; Financing; and Women and Entrepreneurship.

Box 4.12: Women entrepreneurs in some transition countries

Women entrepreneurs are less numerous than men in all transition countries. In countries for which there are data, men start their own businesses twice as often as women. In 2000, only 9% of employed women were entrepreneurs in the Czech Republic as compared to 18.8% of men. The situation was similar in Hungary (women 9.6% and men 18.7%) as well as in Romania, though the proportion of self-employed women is higher due to the larger share of self-employed in agriculture (women 17.4% and men 32.6%).The gender gap in entrepreneurship was even higher in Slovakia and Slovenia, where women's share was respectively 4.1% (vs. men 10.9%) and 6.5% (vs. men 15.3%). These proportions were slightly higher in Bulgaria, Croatia, Estonia, Latvia and Lithuania. In most countries, however, the gap between men and women in entrepreneurial activities had widened during the 1990s.

These trends reflect a loss of potential for job creation and growth as shown by many developed countries, where women-run enterprises are the most dynamic among SMEs. In 2002, women-owned firms in the US employed nearly 9.2 million workers, up 30% from 1997, which reflects a growth rate that is between one-and one-half times the national average.

Source: UNECE, *Women entrepreneurship in Eastern Europe and CIS countries, 2004*

The OECD notes that the reduction of women's barriers to market access, the improvement of their position within the value chain and the enhancement of their productivity is likely to benefit local, national and regional economies as well as households (OECD, 2006b). Overall, the data shows that women entrepreneurs across all types of countries and economies have an important social and economic impact through creating jobs for themselves and for others (see Box 4.13).

In order to attain the objectives of further implementing the United Nations global mandate on gender equality by promoting the economics of gender as a factor of sustained growth, it is important to incorporate the gender entrepreneurial dimension in considering all Small and Medium Enterprise (SME) and growth policies.[25]

4.6.3 The value-added of statistics

In order to develop policies that take into consideration their different impact on women and men entrepreneurs, policy makers need accurate, comparable and reliable sex-disaggregated data on financing, training, regulatory and legal environment of entrepreneurship, as well as on demographic characteristics of entrepreneurs, who they are, what kinds of businesses they run, and how women are faring compared to men. Gender statistics on entrepreneurship can be used effectively to:

- Show the role and value of female and male entrepreneurs in the national economy.
- Provide a better understanding of female and male participation rates in entrepreneurship and its sectoral specifications.
- Provide a better understanding of the factors that influence entrepreneurs.
- Incorporate a gender entrepreneurial dimension in considering all SMEs and growth policies (e.g. the administrative burden in the form of taxes and accounting etc.; addressing women's and men's financing needs for all stages of business; policy coordination and leadership; promotion; training and mentoring; business support and information; associations and networks; regulatory and legal environment; technology access and utilisation: R&D and innovation).
- Make mainstream polices, research and programmes gender sensitive and take into account the specific needs of women and men entrepreneurs at their start-up and growth-oriented stages.

Monitor the effectiveness and impact of government policies, programmes and initiatives on SMEs and entrepreneurship development.

Specific analysis of gender effects in entrepreneurship are still at the early stage. It is important that sex, as a fundamental variable, immigration, and the age of the entrepreneur are identified. While statistics generally serve to gauge the effects of past policy decisions, they also assist investigation of future policy options. If, for example, entrepreneurship statistics yield diverging results by gender, then future policy measures could accordingly be more appropriately directed towards women or men.

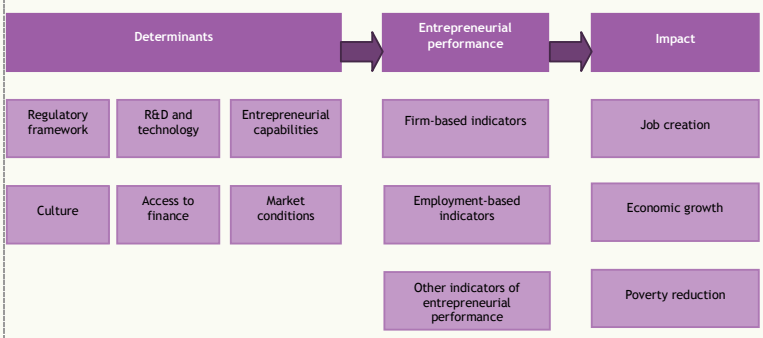
[25] Declaration for the Sixtieth Anniversary of the UNECE, 26 April 2007, Geneva

Box 4.14: Conceptual framework developed by the OECD-Eurostat Entrepreneurship Indicators Programme

The OECD-Eurostat framework for measuring entrepreneurship focuses on: **i)** factors that impede or motivate entrepreneurship (*determinants*); **ii)** measures that provide indicators of the state of entrepreneurship (*entrepreneurial performance*); and **iii)** outcomes (*impacts*) of that performance on the economy as a whole (see Figure, which also lists the various subcategories). Recognizing entrepreneurship as a multi-faceted phenomenon, the framework includes a range of indicators as measurable proxies of different aspects of entrepreneurship. In the first stage, the focus was mainly on indicators of entrepreneurial performance, as listed below:

1. **employer enterprise birth rates / death rates** (businesses with at least one employee);
2. **rates of high-growth firms based on employment/turnover growth;**
3. **Gazelle rates based on employment/turnover** (young high- growth businesses);
4. business churn (the addition of birth and death rates);
5. net business population growth (a measure of births minus deaths);
6. the number of firms aged 3 and 5 years old as a proportion of all firms with employees;
7. the percentage of employees in 3 and 5 year-old firms;
8. the average size of 3 and 5 year-old firms;
9. survival rates after 3 and 5 years,
10. business ownership rates
11. business ownership start-up rates
12. the value-added share of young firms,
13. the average productivity of births, deaths, small and young firms and their contribution to productivity growth,
14. the innovation and export performance of small and young firms.

Figure: Topic categories for entrepreneurship indicators



Sources: Ahmad and Hoffman (2008); OECD (2008), Figure 1.

The OECD (2004), in its research on women's entrepreneurship, has shown that women's overall position in society affects their participation in entrepreneurial activities. Specific responsibilities (e.g., family-related) need to be overcome for them to have similar access to entrepreneurial opportunities as men. To start with, women's overall participation in the labour force needs to improve. Furthermore, women may experience problems in regard to ownership of property and contract-related activities.

A number of countries (Canada, Finland, etc.) have placed considerable emphasis on the development of entrepreneurship indicators within their national policy framework (OECD, 2006a).[26] Available data sources are limited in their ability to differentiate adequately among different types of self-employment. The lack of detailed information on the self-employed and their businesses makes it difficult to target policies to those most in need of support. Specifically, informal micro-entrepreneurs, many of whom are women, are most likely to be excluded from existing policy measures designed to support self-employment and entrepreneurship.

4.6.4 Implications for data collection

The gender dimension has traditionally been completely absent from business statistics. Lack of sex disaggregated data makes it difficult to have a comprehensive understanding of how policies impact on women's and men's entrepreneurial behaviour. One of the main reasons is that for larger and particularly corporate businesses, it can be difficult to identify the entrepreneur.

The analysis of the role of gender in entrepreneurship requires the availability of data both at national and international levels. The most significant issue relates to the definition of entrepreneurs. There was until recently a lack of common frameworks to define entrepreneurs. Statistics have been produced largely in a fragmented manner, suffering from a lack of comparability within and between countries.

A joint OECD-Eurostat project (the Entrepreneurship Indicators Programme) has attempted to

[26] http://www.olis.oecd.org/olis/2006doc.nsf/linkTo/STD-CSTAT(2006)9

close this gap, by developing a standardized definition and a conceptual framework as a basis for collecting comparable indicators of entrepreneurship (see Box 4.14).

Within this project, a manual on how to measure entrepreneurship is also being prepared. A first report was published presenting a first set of indicators on entrepreneurial performance in OECD countries (OECD and Eurostat, 2008). Unfortunately, the gender dimension is still lacking, with no indicator by sex: the focus is on enterprises rather than on entrepreneurs.

It is difficult to translate the concept of entrepreneurship into gender-sensitive statistical measures using existing data collections. It is necessary to change the focus of the data from the characteristics of the enterprises to the characteristics of the people managing/owning the enterprises, including sex. Elements of the entrepreneurial role may be split across shareholders, directors and other senior staff, making it difficult to determine the impact of gender on entrepreneurship. The first major international study to use this approach was the Demographics of Small and Medium-sized Enterprises project[27] (see Box 3.15 in section 3.3.4). Another example is the one-off survey on Factors of Business Success carried out in 13 EU countries (see Box 4.15).

The most common sources for data collection on women and men entrepreneurs are ***household surveys*** (usually Labour Force Surveys), ***business (or enterprise) surveys***, and ***administrative registers of enterprises*** (see Chapter 3 for a detailed description of these sources). But each of these data sources uses different categories when collecting information and each focuses on a different aspect of entrepreneurship. The resulting data is therefore not always comparable. Therefore, when using or comparing statistics on entrepreneurship it is important to take into account the source of the data and what definition for entrepreneurship was used. It would be valuable to have some agreement on the type of information sources to be used and a time frame (e.g. annually, three years, and one-off).

[27] Funded by the European Union and collected data on new businesses in central European countries during their transition to market economies. For further information see European Commission (2008a) and http://forum.europa.eu.int/irc/dsis/dosme/info/data/en/index.htm

In order to understand what drives women's entrepreneurship and what are the consequences for the economy, three levels (individual, firm, and business environmental level) should be addressed (OECD, 2004):

The first level of analysis is at the individual level. It is concerned with women's participation in the labour force and self-employment as a career choice among other available options. Major questions relate to women's entry in and exit from self-employment.

The second level of analysis is at the firm level. That is, once women have engaged in business activities, it examines how well they perform relative to men in terms of survival and growth of their respective firms.

The third level of analysis is at the business environment level. It is related to understanding how the business environment is supporting or obstructing women entrepreneurs.

Relevant areas in the context of entrepreneurship could be policy coordination and leadership, legal environment, promotion of women and men entrepreneurs, role models, access to loans and premises, enterprise support and information centres, mentoring, networks, and training (Stevenson and St-Onge, 2005). Examples of issues which can be addressed within such areas are listed below:

Policy coordination and leadership level

- Have women and men been identified as specific groups in government's SME policies?
- Is the strategic framework for developing SMEs gender sensitive?
- Are women business associations represented at government advisory level?

Promotion of women and men entrepreneurs

- Are there initiatives in place to recognise the achievements of women entrepreneurs?
- Is the media used to stimulate interest in entrepreneurship and promote it?
- Are there role models of women entrepreneurs?

Access to loans and premises

- Do women have equal access to financial sources and premises for starting up/growing a business?
- Can women access finance beyond micro-credit as individual entrepreneurs?

- Are there any difficulties in accessing finance in rural areas?
- Are there any financial programmes targeting specifically women entrepreneurs?

Enterprise support and information centres

- Is there a dedicated system of business support for women entrepreneurs (women's desk in government, SME agencies, etc?)
- Are there many women business advisors?
- Is information easily available for women to access?

Networks

- Do women have networking activities and access to main business and industry associations?
- Is it easy to join a women's business association (easily accessible, free of charge, etc?)
- Is business networking publicised?
- Do women's business associations lobby government on behalf of women entrepreneurs?
- Do these women associations exist in rural areas?

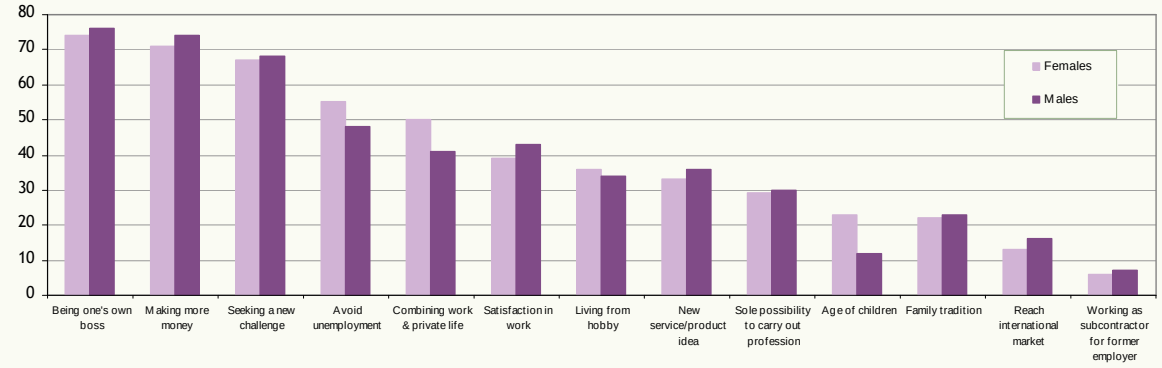
It is also important aside from the demographic characteristics of entrepreneurs to investigate into their motivations and attitudes, the reasons for entrepreneurship – are women's and men's goals similar, do they perceive success differently etc.

Box 4.15: Sex disaggregated data on 'Factors of Business Success' (FOBS)*

Sex-disaggregated data can help to determine the factors that determine the success and growth of new enterprises, and it can show the differences between women and men in the motivations for starting up one's own business, the barriers and risks encountered during the first years of existence, the current situation of the enterprise, and business plans for future development. Looking at the motivations for start-up (Figure 1), 'to avoid unemployment', 'to combine work and private life' and 'the age of the children' are more important for women than for men.

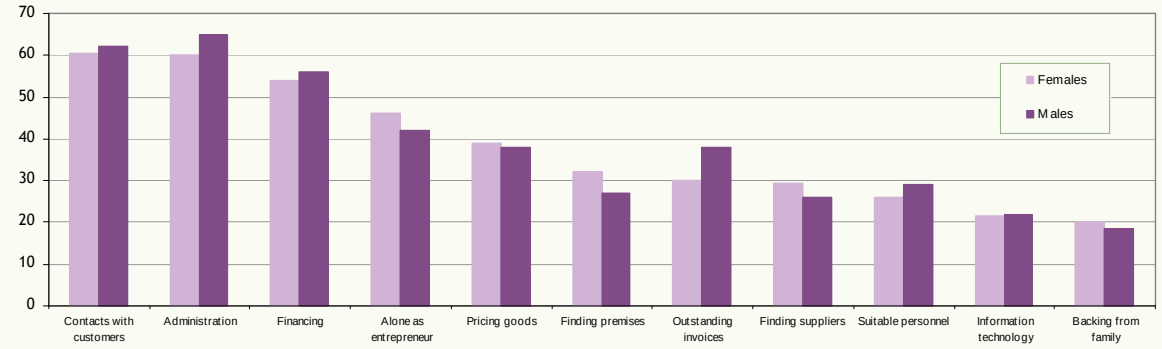
By contrast, for men, 'to get away from an unsatisfactory work situation' ('satisfaction in work' in the Figure) is more important than 'to combine work and private life'. While the 'age of children' comes 10th place out of 13 for women, this motivation ranks last-but-one for men.

Figure 1: Motivation for start-up by sex, average of available countries, in %



Source: FOBS survey, 2005

Figure 2: Start-up difficulties by sex, in %



Source: FOBS survey, 2005

Concerning start-up difficulties (Figure 2), gender differences are rather small, but men cite more often 'outstanding invoices', and finding 'suitable personnel' as start- up difficulties than women. 'Alone as entrepreneur', 'finding premises', 'finding suppliers and 'backing from family' were mentioned slightly more frequently by women.

**The target population of the survey is defined - based on the concepts of the Business Demography data collection - as an enterprise born in 2002, which had survived to 2005 and which was still managed by the original entrepreneur or founder.*

The survey was carried out from June 2005 to January 2006 by the National Statistical Institutes of 13 EU Member States (CZ, DK, EE, FR, IT, LV, LT, LU, AT, PT, SI, SK and SE) and two Acceding Countries (BG and RO).

Source: Eurostat (2006).

4.7 Decision-making

The topics covered in this section are distinct in several ways. First, they span widely from the highest posts in a country to the household. Second, they range across many institutions in a country, including government, business, science and the family. Third, they are topics not usually covered in the programmes of the national statistical office. The topics, however, are critical in assessing women's power and influence relative to that of men's and some – but not all of the data required – are available in various administrative sources.

4.7.1 What it is

Decision-making will be considered as a position from where it is possible to take or influence a decision. The 1995 Beijing Platform for Action emphasized that equality in decision-making is essential to the empowerment of women and that *"women's equal participation in decision-making is not only a demand for simple justice or democracy but can also be seen as a necessary condition for women's interests to be taken into account"* (Para. 181).

One of the clearest measures of gender equality and women's empowerment is the extent of women's representation in top positions in politics. Are women heads of State or Government? To what degree are women represented in national parliaments or in ministerial or sub-ministerial positions? If women are represented, are they in specific areas of government, for example in social and law and justice ministries or are they also in political and economic ministries?

Economic-decision-makers are those who occupy institutional positions in decision-making bodies, they are actively involved in the deliberation and determination of economic policies and they are responsible for implementing them on behalf of the State or the institution they represent. Economic decisions determine both present and future economic performance and assets, with obvious implications for everyone's daily life.

But decision-making is not only carried out in the political or economic spheres. Key positions in other areas are of gender concern, for example, in the administrative sphere, the judiciary or in the media.

A household decision-maker is a person who has a dominant position within a household in making decisions relating to the family (e.g. nutrition for a family, health care, education, investment, spending collective resources, decisions to take a sick family member to a health institution etc.). The main decision-maker may vary according to the decision domain, or the responsibility may be jointly held by several persons in the household.

4.7.2 Why it is important

Decision-making is a critical area where women are still very much under-represented in all spheres of society.

The Universal Declaration of Human Rights states: "*Everyone has the right to take part in the Government of his/her country. The empowerment and autonomy of women and the improvement of women's social, economic and political status is essential for the achievement of both transparent and accountable government and administration, and sustainable development in all areas of life. Equality in political decision-making performs a leverage function without which it is highly unlikely that a real integration of the equality dimension in government policy-making is feasible*" (United Nations, 2005a). Box 4.16 illustrates trends in the share of women in parliament in different regions of the world.

It is important to examine whether the situation of women and men at the national level extends to or is better than in sub-national governmental bodies and in the public sector.

Participation in regional and lower level political posts may provide an entry which will permit women in time to progress to higher level offices. Public sector employment often works in similar ways for women and men. In some countries, the public sector provides the major source of employment for more highly educated women as well as the main route to move up to administrative and management positions. Relevant indicators include the share of women and men in elected and/or appointed positions in state/provincial, regional or municipal levels of government.

Economic decision-making has traditionally been a male-dominated sphere, as has political decision-making. The last twenty years have seen a huge increase in the number of women participating in the labour force almost everywhere and in all sectors. For example, in recent years, women studying economics to post-graduate level and pursuing careers as economists in academia, private sector, government has increased significantly. However, women's representation

at a decision-making level is much lower than men's in major institutions that are responsible for conceiving and formulating ideas, determining strategies and implementing fiscal, monetary and economic policies (see Box 4.17). The effective participation of women in economic and financial decision-making is not only very low, but also the gender dimension has been absent from macroeconomic policies and decisions regarding resource distribution, wealth creation and exchange.

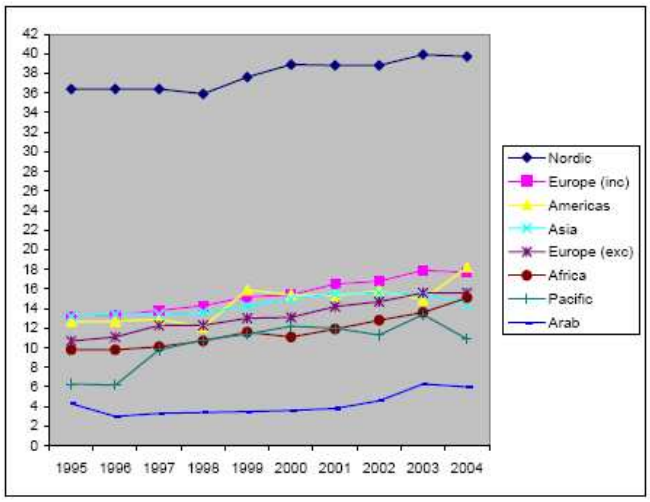
Many decisions that affect the well being of individuals are made within families or households. The gender equality in decision-making at household level by which resources are allocated is vitally important for a family and a society. If there is gender inequality in household decision-making then this affects the economic well-being of women and children in the household. In such households, women are dependent on their husbands and are expected to perform certain labour and household obligations. Household decision-making affects many choices with important consequences including the distribution of income, education, medical and nutrition care, allocation of resources, the allocation of time, purchase of goods, fertility decisions, etc.

Box 4.16: Trends in women representation in political decision-making

The trend in terms of women's representation over the past decade has been one of gradual but steady progress. In 1975, women accounted for 10.9 per cent of members of Parliament worldwide. Ten years later, in 1985, women's representation had increased by only 1 percentage point, to an average 12 per cent. In 1995, the number of women had actually decreased to 11.6 per cent. By 2000, the number of women in parliaments had increased to 13.4 per cent. In January 2008, a new global high was reached, with an average of 17.7 per cent of women in all parliaments (both houses combined). While steady, the progress has been slow.

The Nordic countries have the highest representation of women, with averages consistently over 38 per cent. In January 2008, they reached an average of 41.4 per cent women. In contrast, women are least represented in the Arab States, where as at January 2008 the regional average in both houses combined is 9.0 per cent. While this is half of the global average, it is more than double the rate of seven years ago. Much of this progress is attributable to the implementation of different types of quotas in some countries in the region, including in Djibouti, Jordan, Iraq, Morocco and Tunisia. Women remain under-represented in the parliaments of the Pacific Island States. The average for the Pacific region in October 2005 (excluding Australia and New Zealand, where women's representation stands at 24.7% and 32.2% respectively) is 3.2 per cent.

Figure 2: Women in Parliament by Region: 1995-2004



Sources: *IPU (2006) and IPU/UNDAW, 2008 Women in Politics*, Poster. *http://www.ipu.org/english/surveys.htm*

Box 4.17: Women's representation at an economic decision-making level in the EU*

Women's representation at a decision-making level is much lower than men's in major institutions that are responsible for conceiving and formulating ideas, determining strategies and implementing fiscal, monetary and economic policies. The effective participation of women in economic and financial decision-making is not only very low, but also the gender dimension has been absent from macroeconomic policies and decisions regarding resource distribution, wealth creation and exchange. The European Commission's Roadmap for equality between women and men (2006-2010) includes the promotion of equal representation of women and men in decision-making as one of six priority areas for action.

The study and data collection on female representation in economic decision-making centres started in 2003 by the Greek Presidency of the European Union, and continued by the Italian Presidency, represents a particularly interesting project to define and recommend a set of appropriate indicators in this important area of gender equality, with a particular focus on indicators introduced by the Council of the European Union in 1999 and 2003 as a follow-up to the Beijing Platform for Action in 1995. Some results of this study illustrate inequality in economic decision-making among women and men (2007 data).

- The ***central banks*** of all twenty-seven EU Member States are led by a male governor. The proportion of women among members of the decision-making bodies of the Central Banks is 16%.
- The proportion of women among ministers and deputy ministers/ vice-ministers of the ***Economic Ministries*** is 17.7%. There is much variation between countries –five of the EU Member States have 30% or more women ministers in this area but nine have none at all.
- The proportion of women among *presidents* of the ***trade union organizations*** at the European level is 18.8%. The representation of women in their ***governing bodies*** is 23.3%.
- The proportion of women among the *presidents /chairpersons* of the highest decision-making body of the ***largest publicly-quoted firms*** on the national stock exchange is only 2.9%. Among all *members* of the highest decision-making body it is 10.3%.

*Source: *European Commission (1999)* and *European Commission (2008)*.

Box 4.18: Statistics on the gender balance in decision-making in EU *

Improving statistics on the gender balance in decision-making and monitoring progress in this field are crucial to addressing the under-representation of women. For this reason, the European Commission set up a project to collect, analyze and publish data on women and men in decision-making positions. A regularly updated web- based database is now available to create awareness while monitoring progress on gender equality and the position of women in the decision-making process.

The scope of the project covers decision-making positions in major organizations across three broad domains:

- Political (heads of government, ministers, members of parliament);
- Public sector and judicial (senior civil servants, top judges);
- Social and economic (companies, financial institutions, NGOs).

This database defines a decision-making position as *a position from which it is possible to take or influence a decision at organizational or hierarchical level*. Coverage is limited to organizations having a key influence at European and national level in the three different domains and to those levels or authority that have a major impact on decision-making within those organizations.

*Source: *Council of Europe (2005)*.
See http://ec.europa.eu/social/main.jsp?catId=93&langId=en
Database: http://ec.europa.eu/social/main.jsp?catId=764&langId=en

4.7.3 The value-added of statistics

One of the most effective ways of improving the status and well-being of women is by ensuring their full, equal and effective participation in decision-making at all levels of political, economic and social life. This approach promotes and protects women's human rights while allowing society to benefit from the diverse experiences, talents and capabilities of all its members.

Comparable and comprehensive statistics on women and men in decision-making are essential in order to develop appropriate legislation and regulations that are aimed at eliminating obstacles to women's and men's access to decision-making and managerial positions. The European Commission set up a project to collect, analyze and publish data on women and men in decision-making positions (see Box 4.18).

Statistics on decision-making can be used to:

- Empower social, economic and political status equally amongst women and men
- Provide detailed statistics on the division of power and influence between women and men in a society, to ensure equal distribution and exercise of power and influence between women and men
- Assist the implementation of equal opportunity policies to accommodate diversity in economic, social and political life. Women's experiences are often different from men's and

need to be represented in discussions that result in policy-making and implementation

- Make available detailed statistics on women's exclusion from male-dominated policy domains (such as the military, police, and jurisprudence), macroeconomic policy and foreign affairs
- Assist in developing more women-friendly environments in political institutions such as parliaments and legislatures
- Create or strengthen, as appropriate, mechanisms to monitor women's access to senior levels of decision-making
- Remove gender barriers that directly or indirectly discriminate against participation by both sexes.

Indicators about economic decision-makers are needed to:

- understand the conditions in society for women and men
- understand what affects gender equality
- provide quantifiable information and advocate for gender equality
- monitor policies and their impact on the situation of women and men
- better understand working conditions at a company level and incorporate measures to deal with gender differences into personnel policy. There is a need to improve working conditions for all levels of workers (this will include managers) in terms of "reconciliation of work and family life".

Devising indicators for household level decision-making is more complicated as the designation of a particular person as the decision-maker is seldom formal. Instead, it is a function of a range of factors, including custom, socio-cultural attitudes and gender prejudices. In addition, decision-making within a household will often differ according to the type of decision to be made. For example, while a woman member of the household might be given the responsibility for deciding what food to purchase and cook on a daily basis, the decision as to where the family will live might well be taken primarily by a man.

Statistically sound data are fundamental for the development of proper polices for supporting gender balance in decision-making at household level. Statistics on household decision-making are needed to:

- Strengthen legal systems aimed at elimination of all forms of discrimination against women
- Mainstream a gender perspective in the development process
- Create an environment through economic and social policies to enable women and men to fully exercise their human rights
- Provide equal access for women and their families to health care, nutrition, quality education at all levels, career and employment, community activities
- Change societal attitudes and community practices towards women's and men's role in household decision-making
- Enable women to exercise their right to control their own fertility free of coercion, discrimination and violence. Improve the quality and availability of reproductive health services and barriers to access
- Encourage men's responsibility for sexual and reproductive behaviour and increase male participation in family planning.

4.7.4 Implications for data collection

Decision-making topics are generally not covered in programmes of national statistical offices. Some of the data are available from administrative sources. There are several indicators to consider when measuring political representation and access to decision-making positions. It is obvious that providing a gender breakdown provides an idea of women's access to political power, and can be measured in the following ways:

- Seats held by women and men in national parliaments;
- Number of electoral candidates contesting elections;
- Women and men in highest positions of State;
- Women and men in parliamentary positions.

Fundamental to the participation of women and men in political life is voting. Formal limitations to women's access to suffrage have been abolished in all countries with a national parliamentary system of government. However, practical limitations still remain and these tend to affect women more than men. The standard indicators for measuring voter participation are registration and turnout. Election commissions

usually collect data on the proportion of women and men who vote, but this data source will not provide information on differences affecting the voting behaviour of women and men. For example, this issue was examined in Ireland[28] where a national module on voter participation was attached to the Labour Force Survey after the general election in 2002. The results showed that broadly similar proportions of women and men voted (75.6 per cent for women and 76.1 for men). However, the reasons for not voting were significantly different with a higher proportion of men citing "disillusioned" while more women cited "lack of transport".

Given the widespread under representation of women in national parliaments, more data should be collected on persons not registered to vote, on persons who were registered but did not vote, and on the lack of success of women's success in being elected.

In December 2003, the European Council adopted conclusions and indicators on female representation in decision-making processes in the public and private sectors, referring to the follow-up of the United Nation's Beijing Platform for Action (1995). These indicators are an essential basis for the systematic recording and monitoring of the existing level of gender equality in political and macro-economic decision-making (see Box 4.19).

The gender statistics booklet, *Women and Men in Sweden: Facts and Figures 2008*, is an excellent example of the use of a full range of indicators related to women's and men's positions of power and influence. Only with such broad-based statistics can the questions raised at the beginning of this section on the extent and the sustainability of women's roles in political and economic decision-making be answered (see Box 4.20).

Decision-making in the household

Devising indicators for decision-making in the household is more complicated as the designation of the decision-maker is seldom formal and differs according to the type of decision to be made.

Sometimes the concept of household head, used to identify a reference person to study household structure, is seen as an indicator of decision-making, but this should be avoided: it is often misleading and may not represent the real locus of decision-making.

The popularity of the concept of household head might be partially due to the fact that many people see it as an indicator of decision-making. In particular, where survey instructions to the enumerator or respondent state that the household head is the person considered by other members to be the head, the implication is that this person has the most authority – and thus presumably the greatest decision-making power – in the household. An alternative approach is to replace the designation of household head with a series of questions that ask more explicitly and directly about the different aspects that are often conflated in the notion of household head. In South Africa, for example, some surveys ask which member of the household usually brings in the most money in addition to the usual question about household head (Budlender, 2002). (The household head question was retained because of resistance to abandoning old practices.) Comparison of the responses to the two questions reveals that men who bring in the most money are more likely than women in this position to be named a head of household. Thus, in the 2001 Labour Force Survey, only 7% of the male main money-earners were not household heads, while this was the case for 21% of the female main money-earners. In addition to this gender bias, there were cases where males other than the head were the main earners in male-headed households, and females other than the head were the main earners in female-headed households.

Another aspect of control (headship) that could be asked about separately in a similar way involves control of the dwelling. Thus one could ask in whose name the ownership or lease of the dwelling is registered. This aspect is important from a gender perspective in that where a woman wants to leave a relationship because of domestic abuse, it will be much easier for her to do so if she has some rights to, or control over, the dwelling. Better still, one can attempt to ask more directly about decision-making.

[28] http://www.cso.ie/releasespublications/documents/labour_market/current/qnhsvoterparticipationandabstention.xls

Box 4.19: Indicators developed in the European Council for the follow-up of the Beijing Platform for Action

Women in Power and Decision-making * (adopted in 1999)

1. The proportion of women in the single/lower houses of the national/federal Parliaments of the Member States and in the European Parliament.
2. The proportion of women in the regional Parliaments of the Member States, where appropriate.
3. The proportion of women in the local assemblies of the Member States.
4. Policies to promote a balanced participation in political elections.
5. The proportion of women of the members of the national/ federal Governments and the proportion of women members of the European Commission.
6. The number of women and men senior/junior ministers in the different fields of action (portfolios/ministries) of the national/federal Governments of the Member States.
7. Proportion of the highest-ranking women civil servants.
8. The distribution of the highest-ranking women civil servants in different fields of action.
9. The proportion of women of the Supreme Courts of the Member States and the proportion of women of the members of the European Court of Justice and the Court of First Instance.

Women and men in economic decision-making ** (adopted in 2003)

The proportion and number of women and men among:

1. Governors and deputy/vice-governors of the Central Banks.
2. Members of the decision-making bodies of the Central Banks.
3. Ministers and deputy ministers /vice-ministers of the Economic Ministries.
4. Presidents and vice-presidents of the Labour Confederations.
5. Total governing bodies of the Labour Confederations.
6. Presidents and vice-presidents of the Employer Confederations.
7. Members of total governing bodies of the Employer Confederations.
8. Chiefs of executive boards of the 50 top firms quoted on the national stock exchange.
9. Members of executive boards of the 50 top firms quoted on the national stock exchange.

*Source: *European Parliament Committee on Women's Rights and Gender Equality*
http://www.europarl.europa.eu/comparl/femm/womensday/2005/work5l_en.pdf
**Source: *Review of the implementation by the Member States and the EU institutions of the Beijing Platform for Action.*
http://ec.europa.eu/social/main.jsp?catId=765&langId=en

Where this is done, the question needs to specify the type of decision-making under consideration, for example food purchases, where to live, or decisions about children's schooling. The standard core module for the Demographic and Health Surveys includes the following five questions in the women's questionnaire:

- Who usually decides how your husband's/ partner's earnings will be used: you, your husband/partner, or you and your husband/ partner jointly?
- Who usually makes decisions about health care for yourself: you, your husband/ partner, you and your husband/ partner jointly, or someone else?
- Who usually makes decisions about making major household purchases?
- Who usually makes decisions about making purchases for daily household needs?
- Who usually makes decisions about visits to your family or relatives?

In addition, the standard women's status module for Demographic and Health surveys includes questions as to:

- Who chose the woman's current/last husband/partner?
- Was the woman asked whether she wanted to marry/live with him when he was chosen?
- Who has the final say on (a) whether the woman should work to earn money, (b) whether to use contraception, (c) decision about children's schooling, (d) what to do if a child falls sick, (e) how children should be disciplined, and (f) whether to have another child?
- Does the woman have any money of her own that she alone can decide how to use?

The resultant statistics are likely to be more reliable if more than one person in the household is asked the same question as perceptions might differ as to where the real locus of decision-making lies. Perceptions may differ between the main couple in a particular household and other members of that household, such as their children, parents, siblings or others.

The woman's status module of the Demographic and Health survey asks for women's level of agreement with the following statements:

- The important decisions in the family should be made only by the men of the family;
- A married woman should be allowed to work outside the home if she wants to;

Box 4.20: Influence and power in Sweden*

The following statistics were included in the gender statistics booklet *Women and Men in Sweden: Facts and Figures 2008*, showing for each the number and share of women and men.

Economic Decision-making:

- Board members of governmental enterprises, 2008
- Sex distribution in leadership of the 50 largest enterprises, 2008 (board members: chairperson, management: managing directors)
- Elected officials and members of trade unions, 1973, 1985 and 2008
- Managers and total employees in private and public sector, 2006
- Managers by sector, 2006 (private, public: government, municipalities, county councils)
- Chairpersons and managing directors in listed companies 2006–2007
- Swedish industry: Board and annual general meeting, 2006–2009
- Enterprises listed on the stock exchange in 2008: Board members and managing directors

Political Decision-making:

National level:

- Composition of Parliament, 1919-2006
- Elected to Parliament by age, 1994, 1998, 2002, 2006
- Elected to Parliament by Party (2006)
- Nominated and elected candidates in general elections by country of birth
- Party chairpersons
- Parliamentary committees by area of work in 1973, 1985 and 2008
- Top officials in government offices in 1973, 1985, 1998 and 2008 (ministers, state secretaries, top administrators)
- Composition of committees in 1981, 1990 and 2007 (chairperson, members, specialists, secretaries and others)

Regional level:

- Ordinary members of central and regional governmental lay boards, 1988–2006 (County labour board, Police authorities in 2006)
- Boards and chairpersons, shares of women and men, 1988-2004
- Members of regional governmental authorities by area of work, 2004

Municipal/local level:

- Positions of trust in municipalities, by organization, 2007 (Municipal council, Municipal executive committee, Boards, District committees)
- Positions of trust in county councils, by organization, 2007
- Positions of trust in municipalities by board, 2007 (Health/care/ social services, Children/young persons/education, Culture/leisure/ tourism, Engineering/environment/ traffic/real estate)
- Positions of trust in county councils, by board, 2007
- Positions of trust in trade union committees in county councils, by board, 2007
- Positions of trust in municipalities/ county councils, by position, 2007 (Chairperson, Deputy chairperson, Members, Replacement member)

Also included are women and men voting in parliamentary elections, 1973–2006, Judges in 2007 by type of court, and Women and men in the military, 2007.

* Source: Statistics Sweden, *Women and Men in Sweden: Facts and Figures 2008* (Stockholm, 2008).

- The wife has a right to express her opinion even when she disagrees with what her husband is saying.

A more recent example of questions on the household decision-making process comes from the Generations and Gender Programme[29]. This is an ongoing project in UNECE countries comprising a system of panel surveys of nationally representative samples of 18-79 year-olds. The surveys include a series of questions on power and decision-making, as follows:

Who makes decisions about the following issues in your household?

- routine purchases for the household
- occasional more expensive purchases for the household
- the time you spend in paid work
- the time your partner/spouse spends in paid work
- the way children are raised
- social life and leisure activities.

Respondents indicate whether it is always or usually the respondent, his or her partner, whether the responsibility is shared, or whether it is someone else in the household or not living in the household who make decisions on each type of issue.

Another question relating to decision-making which is included in the Generations and Gender Surveys concerns the organization of income. Respondents are shown a card with a list of items and are asked which of the items fits best:

How do you and your partner/spouse organise your household income?

- I manage all the money and give my partner/ spouse his/her share
- My partner/spouse manages all the money and gives me my share
- We pool all the money and each takes out what we need
- We pool some of the money and keep the rest separate
- We each keep our own money separate.

[29] http://www.unece.org/pau/ggp/

4.8 Agriculture

4.8.1 What it is

Historically, agriculture has provided a livelihood for the majority of the world's rural population and indeed continues to do so in many developing countries. Consequently, most national statistical systems compile, tabulate and disseminate a wide range of statistical information on agricultural production, prices and markets, as well as on the structure of the agricultural sector. However, in many countries there is a need for more data on the lives of people engaged in agriculture. Such areas include data on the situation of women and men in relation to the farm labour force, farm ownership and inheritance, the ongoing availability of education and IT training, and the availability of public and private rural transport for access to urban areas for educational, medical and other purposes.

The production and use of accurate sex-disaggregated data on the agricultural sector and rural areas is an essential step for the elaboration of sustainable development programmes, crucial for genuine gender mainstreaming, and a powerful way to combat the persisting invisibility of rural women in the planning process. Agricultural statistics cover both commercial agriculture (production primarily for sale) and farming for own consumption. In more developed countries, thresholds relating to size of the area being farmed are often used to exclude very small farms in surveys, on the basis that they contribute very little to agricultural production. However the labour input of these farms, and their contribution to rural society, requires that they should be included in agricultural censuses.

In many countries where agriculture makes a single figure contribution to national GDP, agriculture is sometimes merged with related areas such as forestry, food and environment. For the purposes of this manual, our focus has been solely on agriculture with particular attention given to issues of concern to women involved in farming.

4.8.2 Why it is important

In less developed economies, agriculture is often of primary importance in the sustenance of predominantly rural populations. The availability of agricultural work and resources, land for families to rear livestock and grow crops, are

crucial elements in the wellbeing of these populations.

More developed economies, while less dependent on agriculture, often have a more diversified involvement in farming. Many statistical offices have tried to improve the availability of agricultural labour statistics by collecting data on the sex and age of agricultural labourers and the type of labour provided, e.g. family versus non-family labour, paid versus non-paid labour, permanent, seasonal and occasional labour, and labour support groups. Such data contribute to a better understanding about labour relations in the agricultural sector in general and women's involvement in agricultural production in particular, irrespective of their access to productive resources. Moreover, this information is essential for realistic planning of sustainable agricultural development.

Social changes in rural areas resulting in declining (and ageing) farm populations and the shrinking of viable employment prospects on-farm in the European region have prompted policy makers to place greater emphasis on the use of agricultural statistics in their social context. Within the EU and throughout the European region, socially-relevant agricultural statistical information is becoming increasingly important for both agricultural and rural policy formulation. For example, Hill (2002) has noted that:

> Policies involving agriculture require information about production of commodities and about the farms that produce them. Understanding the behaviour of the family-farm is central to many issues and increasingly relevant as objectives evolve and the pluri-active nature of farm households is recognised.

An FAO review of rural gender issues in different world regions identified a number of rural characteristics and issues that have gender relevance and should concern agricultural and rural policy makers and analysts:

Population issues (gender and age structure and dynamics)

- Rural population is often in the majority
- Rural-urban migration (especially among youth)
- Rural population ageing

Rural economic issues (gender structure and dynamics)

- Rural unemployment
- Commuting
- Below-average agricultural incomes
- Rural poverty dimensions

Agricultural characteristics

- Declining importance of agriculture
- Dual farm structure
- Subsistence farming economy
- Fragmented holding structure
- Land ownership issue
- Lack of investment capital
- Invisibility of women in agriculture

Gender issues - rural Europe

- Feminisation of agriculture
- Gender-based inequalities in access to productive resources
- Gender-based inequalities in off-farm employment opportunities
- Capacity building
- Participation, political status
- Quality of life, domestic violence

Rural women

- Work in black or grey labour markets
- Self-employment in rural areas
- Female farm-heads in transition countries
- Rural/farming women's access to resources
- Land rights/use
- Domestic violence in rural areas
- Human trafficking (rural)
- Women's representation in decision-making; farm/agricultural organizations

4.8.3 The value-added of statistics

More sex-disaggregated data need to be produced on ownership of, access to and control over *productive resources*, whether land, water, equipment, inputs, information and/or credit in order to gain greater insight into intra-household decision-making processes. This is essential for the planning and development of agricultural interventions and poverty reduction strategies. Data collected during the 2001/2002 Annual Agricultural Survey undertaken in Burkina Faso showed that male farmers managed and cultivated on average more land and larger holdings than female farmers. This is likely to be the result of gender-based differences in access to and control

over land. Detailed statistics on land ownership and access are required if such differences are to be fully understood.

The relative importance of agriculture to an economy and to a society can vary significantly across different statistical measures. Gross value added (GVA) in agriculture represented 1.9% of total GVA for the EU-25 in 2005, a decline from 2.8% in 1995 (Eurostat 2007a). Agricultural products are relatively low in value-added compared to high technology products. However, using a measure such as annual work units generally results in a larger contribution from agriculture at EU level, while using the number of persons working in agriculture (including on a part-time basis and on own account) further increases the importance of agriculture to the European economy. Moving to a concept such as the share of total land used for farming shows how important agriculture is to domains such as the environment and biodiversity. Hence, policy-makers and economists need to take a multi-dimensional view of agriculture looking not only at its impact on the economy but also on society and the environment.

For example, over 90% of the population of countries such as Bhutan and Nepal lived in rural areas in 2004 and more people were involved in agriculture than lived in these rural areas (FAO, 2007). At the other end of the scale, many of the EU countries had under 5% of their population living in rural areas. In more developed countries the relative sizes of the rural and agricultural populations[30] vary considerably, however care should be taken to note whether persons are being classified to agriculture on the basis of their principal occupation or on the basis of performing any agricultural work during the year. Overall at World level for 2004, 40.8% of persons were engaged in agriculture, and the ratio of the agricultural population to the rural population was 79.5%.

[30] *Agricultural population* is defined as all persons depending for their livelihood on agriculture, hunting, fishing and forestry. It comprises all persons economically active in agriculture as well as their non-working dependents. It is not necessary that this referred population exclusively come from rural population. *Rural population* refers to the population residing in non-urban areas. See FAO Glossary at http://faostat.fao.org/site/379/default.aspx

4.8.4 Implications for data collection

The integration of gender concerns into the objectives of agricultural censuses is of crucial importance for ensuring the production of sex-disaggregated agricultural data. It dictates a gender-aware review of the statistical methodologies and tools used, and determines the analysis, presentation and dissemination of such data. Gender concerns tend to be ignored or overlooked when they are not specifically referred to in the objectives of the census.

Systematic under-reporting of women farmers' involvement in agricultural production has occurred especially when censuses focused on commercial rather than on communal or subsistence farming activities (on large-scale agricultural production units, omitting small-scale units), and when censuses excluded peri-urban and urban agricultural activities. In many developing countries, women farmers tend to be more actively involved in small-scale subsistence and peri-urban farming.

At times agricultural censuses fail to accurately capture existing gender interactions, differences and inequalities in the agricultural sector due to gender biases in the way standard statistical concepts and definitions are applied. Often such biases can be reduced by improving the use of standard concepts through better training of interviewers and supervisors, drawing their attention to gender concerns in the agricultural sector and in particular in interview situations. Census sensitization campaigns could stress the importance of reporting on both men's and women's work in the agricultural sector, requesting that responses by the head of the household or household reference person be complemented with information provided by other household members directly involved in agricultural production.

Wherever possible, a national gender consultant experienced in both gender and statistical analysis should work with the census team on various activities, including:

- the need for sex-disaggregated data
- preparation of a gender statistics component for enumerator training
- review for gender biases of questionnaires, sampling and definition;
- facilitation of contacts between statisticians and gender planners

- preparation of outlines of publication tables; and
- review of final publications and distribution plan.

Data on the size of all holdings, even those without land, need to be covered in order to construct a complete picture of holding types by size alone, or by correlating size with other variables such as income or work on the holding. A holding with no land can be extremely significant in different types of situations; for example, in the case of the poorest farmers (who are poor precisely because they are landless) or farms based on new, high-yielding techniques that require little land. Also, many women may work holdings with no or only tiny areas of land, rearing livestock or poultry or growing vegetables. This type of holding may also be found in urban areas. These issues may need to be investigated through supplemental surveys.

Agricultural censuses and surveys are two of the most important sources of sex-disaggregated agricultural data. An agricultural census is best suited for the collection of structural data (such as areas of holding, land use, livestock numbers, use of machinery and farm labour inputs) rather than performance data (such as prices, production, farm costs and farm incomes). Performance data are best collected through frequent sample surveys. Consequently, agricultural censuses may not be able to produce all the required sex-disaggregated agricultural data and more in-depth data may need to be obtained from thematic agricultural surveys. As a result, the World Programme for the 2010 Round of Agricultural Censuses encourages countries to plan such surveys as an integral part of agricultural census planning.

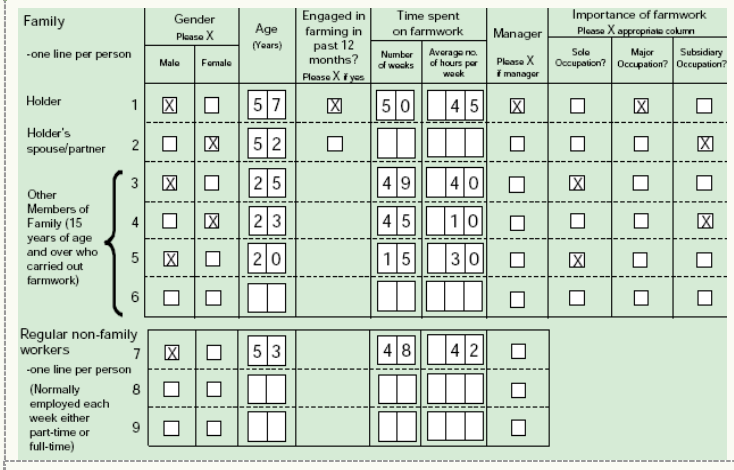
The complexity of the agricultural holder concept has been recognized in the World Programme for the Census of Agriculture 2010 and has resulted in an amendment of the *agricultural holder* definition. The new definition allows for the possibility that a group of people be considered as the holder.

Important definitions

As in other areas of statistics, it is important to use standard definitions to ensure comparability (FAO, 2005).

Box 4.21: Agriculture survey in Ireland

The following is an example of a filled-in section from a postal farm questionnaire* that collects information on the agricultural workforce in Ireland, within an annual survey on farming activity required by a EU Council Regulation. Line 1 is used to collect information on the farm holder, line 2 to collect data on the spouse, lines 3-6 to collect data on other family workers and lines 7-12 to collect data on non-family workers. Limited space is devoted to the work-force in the questionnaire, but it should be kept in mind that this example comes from an EU country. An interview-based survey in a country where agriculture is of high importance to the economy and society, such as a developing country, would need to examine these issues in greater detail.



Family -one line per person		Gender Please X: Male	Gender Please X: Female	Age (Years)	Engaged in farming in past 12 months? Please X if yes	Time spent on farmwork: Number of weeks	Time spent on farmwork: Average no. of hours per week	Manager Please X if manager	Importance of farmwork Please X appropriate column: Sole Occupation?	Importance of farmwork: Major Occupation?	Importance of farmwork: Subsidiary Occupation?
Holder	1	X		57	X	50	45	X		X	
Holder's spouse/partner	2		X	52							X
Other Members of Family (15 years of age and over who carried out farmwork)	3	X		25		49	40				
	4		X	23		45	10				X
	5	X		20		15	30				
	6										
Regular non-family workers -one line per person (Normally employed each week either part-time or full-time)	7	X		53		48	42				
	8										
	9										

* See http://www.cso.ie/surveysandmethodologies/surveyforms/ag_form_surveyjune.htm

The *agricultural holder* is defined as the person or group of persons who make the major decisions regarding resource use and exercise management control over the agricultural holding operation. The novelty about this definition as proposed by the World Programme for the Census of Agriculture 2010 is the possibility that a group of people be considered as the holder, and this may make a difference in the resulting gender composition of agricultural holders.

The sub-holder and sub-holding concepts have been introduced into the World Programme for the 2010 Round of Agricultural Censuses in order to obtain a better understanding of the roles

of selected household members, especially female members, in the management of a holding. These concepts, which may not be applicable to all countries, need to be developed and tested in accordance with national agricultural practices.

A *sub-holding* is defined as a single agricultural activity or group of activities managed by a particular person or group of persons in the holder's household on behalf of the agricultural holder. A *sub-holder* is the person or group of persons responsible for managing a sub-holding on the holder's behalf. The sub-holder does not necessarily have to be the formal owner of the productive resources used. Identifying each sub-holding and sub-holder in the holding requires answering a series of questions on the role of each household member in the management and operations of the holding during the census reference year.

Concepts such as *holder* and *manager* can be used to distinguish between ownership of the farm and responsibility for management of the farm. Similarly, concepts such as *persons* and *annual work units* can be used to identify the level of part-time and casual labour that takes place in agriculture. Often farmers may also have occupations outside of farming and in more general surveys, such as a Labour Force Survey, their principal occupation may be non-agricultural, such as teaching or farm-tourism activities.

Box 4.21 shows an example of a section from an Agricultural survey that collects information on the agricultural workforce in Ireland.

4.9 Access to assets

4.9.1 What it is

Assets are defined as stocks of financial, human, natural, or social resources that can be acquired, developed, transformed, improved and transferred across generations (Ford Foundation, 2004, page 9).

Assets can be tangible, e.g. land, housing, financial capital, tools, machinery, jewellery, or less tangible, e.g. human capital (education), human assets (intellectual, biological), social capital (information, socio-economic networks and extensions). Because intangible assets may not be so easily conceptualized and measured, in this section we only focus on tangible *economic assets*, either financial assets or real assets:

- *Real assets* include housing, land, livestock, businesses, equipment, tools and consumer durables
- *Financial assets* include cash, accounts of various kinds, stocks, bonds, trusts, insurances and private and public pensions.

Access embraces not only the ownership and the legal rights but also the control that an individual may have or claim over a present or a future asset. The legal aspect of accessing assets is a very important aspect for a gender perspective, i.e. the laws that regulate the transfer, ownership and/or the control of assets from one person to another, within the household (as husband and wife in case of a divorce), within families and family members (inheritance) or in general within the community or the nation (rights over common land, spouse's pension).

Economic assets have three main functions. They serve as:

1. *Means of consumption* (enjoyment). In this respect tangible goods are owned for the enjoyment of their use and consumption over time (for example, durable goods like a fridge or a TV set)
2. *Safety net* (ownership and control). In this respect, the crucial issue to explore is what resources do women and men own and control (for example, financial assets like insurances, bank accounts or real assets like housing, land or jewellery)
3. *Source of income* (control and mobilization). In this respect, the crucial issue to explore is whether women can mobilize resources of their own to generate income (profits, interests or rent), to access more resources and to preserve their assets (for example livestock, yard, vehicles, machinery, tools but also cash).

Individuals may access assets directly or indirectly (Agarwal, 1994). *Directly*, a person has a title on an asset or a claim that is legally and socially recognizable and that is enforceable by external authorities such as village-based institutions or the nation state. Personal savings before marriage are an example of assets directly accessible by individuals. *Indirectly* a person may control an asset that is not individually owned and may be available at the household level or at the community level.

The issue of ***control*** in both cases is important and has two dimensions:

- The ability to take decisions regarding the *disposal* of the asset through sale, mortgage, bequest, or gift.
- The ability to take decisions regarding the *use* of the asset, including leasing it out or self-managing it and disposing of its produce or returns if any.

Even when women have legal ownership over an asset, they may still lack the control over the asset. Women may face obstacles which may prevent them to realize gains from it. They may be excluded from the decisions that affect both intra-household dynamics and household and individual production capability in the long run (household behaviour).

4.9.2 Why it is important

Economic assets spread risk over time and can play a critical role in sheltering women from poverty, economic insecurity, and vulnerability to shocks. Ownership and control over assets provide direct and indirect benefits to individuals and households including a secure place to live, the means of livelihood, protection during emergencies and access to credit that can be used for investment or consumption.

Empirical studies have shown that men and women do not have the same access to assets and productive resources: men are very often the only ones to have a title or a socially recognized claim over most of the household assets, especially in developing countries. Gender disparities exist particularly when assets are transferred within families as in the event of a marriage, a succession or in the case of a divorce, when women face discrimination. Women may be subject to discriminatory property, family and inheritance laws as well as cultural practices. This gender-based disparity leads to exclusion from participation in the economy and society.

In Eastern Europe and Central Asia the legal framework is not openly discriminatory against women with only a few exceptions, e.g. on divorces or inheritance. Nevertheless, even when statutory and customary laws provide equal access to assets for men and women, women can face other types of obstacles.

Legal rights which have the most impact on women in this region are the ones related to *intra-household issues*, primarily women's right to access household assets when the family structure changes because of divorce; incapacity or abandonment of a spouse; death of a spouse or of parents; childbirth. Strong bias in favour of men also exists in legal inheritance rights and in social security and widowhood pensions.

In the former Soviet Republics transformation from planned to market economy opened new opportunities for relatively highly educated women, but at the same time had serious implications in the re-distribution of assets and level of financing within societies as well as in the reduction in social welfare. As an example, based on expert estimation, women in Russia (and in other CIS countries) obtained only 5-7% of privatized assets; in Moldova only 1%.

While most people in the developed world take access to banking services for granted, price and non-price barriers (in particular physical barriers, affordability and eligibility) prevent large part of the population in developing countries and emerging markets from accessing and using formal banking services. In general, these barriers equally affect women and men. Yet women may face gender-based obstacles towards credits, given that women's lack of wealth or property ownership results in them not having access to most loan applications. Also, since women's businesses tend to be concentrated in informal or low-growth sectors (e.g. agriculture, handicraft, petty retail sales), they are viewed as less attractive investments.

In fact, women who are able to mobilize assets for income generation are more likely to operate in the informal sector. These business assets play an important role in economic activities whose significance is often ignored by national statistics and can effectively be an important seed-bed for new entrants into micro enterprises. Women mobilizing economic assets are less likely to be members of mainstream business associations and networks where information on business and market opportunities is generated and shared.

Women often not only lack access and control over economic assets but also lack decision-making power and authority within the household. These two dimensions may go together – for example, higher control over assets may give women a higher bargaining power within the household. It should be also kept in mind, that, in time of crisis, for example, women deplete their own assets at a faster rate than men, with disproportionate impact on their potential earnings when using real assets, as shown in Box 4.22.

Furthermore, since saving out of a current income is one of the primary means of accumulating individual wealth, there is an interaction between access to assets and participation in the labour market. In particular, women's lower wages, women's primary role with childcare, and women's higher employment in the informal sector, all affect women's ability to accumulate individual savings.

A series of key issues on gender and economic assets are summarized in Box 4.23.

Gender inequity is thus the result of an overlapping set of economic, social, cultural and political inequalities that reinforce each other. Differences in endowments based on sex may come from market failures (labour, credit, insurance) as well as from political and institutional gender discrimination (inheritance, divorce).

Cultural, regulatory and legal barriers can impede women's access to a range of essential financial and non-financial resources. The implications of these inequalities cause women to have less access to property rights, wealth and education and limit their access to labour and financial markets and to spheres of activity outside the home. This in turn, constrains their ability to influence household decisions and to cope with life-changing events like childcare, divorce, widowhood, illness and aging, thus increasing their vulnerability.

Box 4.22: Empirical study showing a gender pattern on asset depletion among the poor during time of crisis

A 2005 empirical study from low-income married couples in Bangkok showed that in time of crisis, women tend to deplete their own assets at a faster rate (26%) than men and deplete jointly-owned assets at an even faster rate (64%) than men. Moreover, the rates increase significantly if the earnings are used for household expenses, showing that women tend to deplete jointly-owned assets at a faster rate (28%) than men, and individually-owned assets at an even faster rate (38%) than men.

Finally, the study showed that the different gender pattern on asset depletion disproportionately impact on the potential earnings of women compared to men, thereby maintaining or increasing women's vulnerability and making micro-lending schemes risky and unstable for them.

Source: *Antonopoulos and Floro (2005)*.

Box 4.23: Key Issues on gender and economic assets

Asset inequality and property rights

- The disparities in property rights and social norms are fundamental for acquiring ownership and control over assets. Legal disparities between men and women on marital regimes, inheritance laws, and customs and social norms increase inequalities
- Analysis of "household wealth" ignores the fundamental institutional issues governing individual property rights. Sex-disaggregated information is important for reform of key laws that underpin social institutions, including divorce, inheritance, and family law more broadly.

Poverty reduction

- Assets inequality, combined with market failures, leads to differential productivity between those who own assets and those who do not, which creates poverty and inequality traps
- Evidence from different countries like Brazil, Cote d'Ivoire and Bangladesh suggests that women are more likely than men to use their incomes to improve their children's nutrition, health care and schooling, therefore improving opportunities for the next generation, with positive effects on poverty reduction.

Women's vulnerability to shocks

- Lack of ownership, control and decision power over assets may result in greater economic vulnerability for women, especially in the event of a divorce or death of the husband
- Women tend to face greater market (pay) or policy (pensions) discrimination. Moreover, pensions also reflect market discrimination, and pay discrimination is partly a result of policy, or lack of good policies. Therefore, women are more vulnerable to economic shocks (unpredictable events) within the community as well as within the household.

Economic growth and entrepreneurship

- Gender bias limits the economic potential of half of the society: gender inequality, including in access to assets, which remains pervasive worldwide, tends to lower the productivity of labour and the efficiency of labour allocation in households and the economy, intensifying the unequal distribution of resources.
- Women may not benefit from assets owned and controlled by men, not only within the community, but also within the household. A lack of social and economic networks, for example, may lead to discriminatory practices and obstacles
- Women continue to have systematically poorer control over a range of productive resources and in most developing regions female- run enterprises tend to be under-capitalized, having poorer access to physical assets, extension information, and credit than male-run enterprises.

4.9.3 The value-added of statistics

Because of these inequalities and biases in access to economic assets, individual-level data are necessary in order to fully understand how asset accumulation or depletion may affect differently women and men, especially in the event of a policy change or an unexpected event altering the course of life. They are also essential for specific programs concerned with assets, such as land redistribution programs or those promoting home ownership, and for improving the understanding and effectiveness of several other policy issues related to poverty reduction, social protection, the empowerment of women (Millennium Development Goal #3), and the promotion of pro-poor economic growth, as well as to help policymakers assess the extent to which such international targets promoting gender equality are being met.

Few surveys collect data on assets at the individual level which would allow examining the gender dimensions of assets ownership and wealth gap, and these usually focus on a limited number of assets rather than on the full range of material and financial assets. Moreover, few studies examine whether economic assets are owned individually or jointly, how assets were acquired, what is their current value, and the rights, the tenure and the level of control that individuals have over each type of assets.

The limited existing information shows that women in many developing countries are far less likely than men to have ownership and/or control of productive assets (see Box 4.24), and that women may not receive the benefits of assets held by men, even when they live in the same household.

One of the main reasons why official sex-disaggregated data are lacking is that very few household surveys collect data on ownership of assets at the individual level (not to mention the gap between ownership and control). Assets data are routinely collected, but normally only at the household level and only a few surveys actually collect individual information on ownership and/or control of land, housing, livestock and other productive assets. Without this kind of data researchers and policy makers have only an incomplete understanding of the assets that women own, how they acquire them, and how they use them to influence decisions concerning their own and others' well-being.

For a long time, economists did not adequately recognize that gender inequity has an impact in the home, and models assumed that decisions were taken by one person (head of household) with no room for different choices across

Box 4.24: Data on gender and assets ownership

Housing

- In a 2004 survey in West Bengala, of 450 women surveyed about 35% owned land property. Of these nearly 47% owned a house only, 36% owned land only and 9% owned both
- In a 2001 survey in Nicaragua, 44% of owned residences belonged to women, 50% to men while 6% were held jointly by both spouses
- In a 2003 survey in Panama, 42% of owned residences belonged to women (31% in 1997), 42% were owned by men (58% in 1997), and 16% were held in the names of both partners (11% in 1997).

Land ownership

- In Latin America, in the various national rural household surveys in the early 2000, the share of female landowners ranged from 11% (Brazil) to 27% (Paraguay)
- A 2001 household survey in Pakistan found that women owned less that 3% of the plots, even though 67% of the sampled villages reported that women had a right to inherit land
- According to the 2001 Population Census in Nepal, only about 11% of women own land and among those, around 90% own less than 1 acre.

Livestock ownership

- In Nicaragua 37% of the livestock owners are women, 23% are men, while livestock is owned by both in 40% of households. Men, however, are more likely to own cattle, horses and donkeys while women own pig and poultry.

Business assets

- In Ghana, although women are more likely than men to own business assets, the mean value of business assets owned by men is much higher than that owned by women
- Recent data in Nicaragua show that it was more likely that the household business was owned by a woman (49%) than a man (37%), while in Panama it was more likely to be owned by a man (59%) than a woman (30%). In both countries many household businesses were owned jointly by a couple (14% Nicaragua, 11% Panama).

Other physical assets

- An analysis of data from a UNICEF/IFPRI/UDS (2001) survey in Ghana shows that men are far more likely than women to own bicycles, cars or motorcycles (72% of men owned a bicycle compared to 0.7% of women) as well as canoes and ploughs. Women by contrast, are far more likely to own bowls and *makolles* (metal containers).

Source: *Doss et al. (2008)*.

spouses. One of the consequences of this view suggests that taxes on household will not affect the allocation of resources within it. Economists now question this view and econometric work shows that an increase in a woman's relative worth and an improvement in her fallback options (as in the event of a divorce) have effects on consumption patterns as shown in Box 4.25.

Box 4.25: Examples of how gender equity may have an impact at the household level

- The health of Brazilian children improves when additional non-labour income is in the hands of women.
- In the United Kingdom, when legislation ensured that child support payments were made directly to mother, expenditures on children's clothing tended to rise.
- In Bangladesh and South Africa, women bringing more assets into the marriage increase household expenditures on children's education.

Source: *World Bank (2007)*.

Because government policy, social norms, intra-family arrangements, and the market determine ownership, control and accumulation of assets, gender bias in each of these different institutions and practices limit women's ability to obtain and keep economic assets. Yet these manifestations of inequity are difficult to capture in a survey or in a dataset and are not generally independent from one another. An effort to show these interrelationships can illustrate the nature and implications of the inequalities existing between men and women. Even if the role of statistics in the observation of direct inequalities may appear limited, nevertheless statistical information on the infringement of legal constraints or on legal inequalities can be relevant.

4.9.4 Implications for data collection

Why is it difficult?

By comparison to other topics, *gender and access to economic assets* is a relatively new field of research: only few studies address this particular issue and have introduced a module or a specific survey, but there are neither standards nor specific recommendations concerning data collection in this domain.

When data on economic assets and wealth in general exist, they usually have been collected at the household level rather than at the individual level, as we have seen, which means it is difficult to assign individual ownership to assets. For example, when comparing across household types, it is challenging to compare households with one adult to those with multiple adults. Yet there are several lessons learned from a few previous studies that are presented and discussed below.

In general, the definitions and delimitations of "access" and "assets" are the most important for data collection. For example, the legal ownership and control of assets brought to, acquired during and, if the case, divided after, marriage, may differ across countries and within countries because of federal legal system or customary laws. For this reason, in order to design an appropriate survey questionnaire, one would have to know the legal context (can individuals opt for alternative marital regimes, for example, or what are the consequences in case of a divorce).

Another problem arises in the choice of time frame and frequency of data collection, given the differences between assets in time: for instance, it may take more time to accumulate and transfer some assets than others; some may last longer than others or can be used in multiple ways over time, and all these differences and patterns may be related to gender. For example, recent studies (Afghanistan) have shown that big animals (cows, horses) are more likely to be held by men whereas birds with a shorter life cycle are more likely to be held by women, who have the control of them but not the control over the profits generated by them.

Finally, women are not a homogenous group and differ by age, marital status, education and access to resources in very different ways. The timing, composition and method of acquisition of an economic asset can reflect these differences together with discriminatory practices, and may differ substantially cross-culturally. To distinguish discriminatory practices against women from differences in the individual patterns of accumulation, depletion or transfer of assets is therefore one of the main problems in the collection of data about access to assets. Because of all these differences, the timing of acquisition of an economic asset and the control over an asset are relevant data to collect because they matter for women's bargaining power, and

determine their vulnerability in the event of an economic shock, a change in their marital status or a policy change that may affect the asset.

Which type of survey is best?

Because this is a multidimensional field of research, there is no preferred method to collect data on gender and access to assets.

One element which will affect the survey design is the regional context. For example, a detailed survey on access to financial assets will be different if focusing on rural areas instead of urban areas. Moreover, it will also depend on whether it is focusing on the effects of a new policy or an economic reform (privatization, welfare reform, land redistribution).

The survey design will also depend on the rationale of the survey. In this regard, it is necessary to answer some preliminary questions: What do we want to know exactly? What is the institutional context? What are the gender issues: Women's vulnerability and perception of poverty? Women's bargaining power within the household? Asset accumulation and poverty reduction? Economic growth? Women's self-employment and access to business assets?

Once the rationale of the survey has been defined, then one can decide whether to introduce a dedicated survey on access to assets, thereby collecting the full set of individual information on asset ownership and control, or whether to insert a short module on assets in an on-going survey.

Dedicated (or ad hoc) surveys

A dedicated survey has the advantage of making the point about access and assets distribution with sex-disaggregated data and detailed questions on ownership and control on both the full set of *financial* assets (including access to assets as collateral for financial purposes – security for a loan – or to pensions) and the full set of *physical* assets (including access to vehicles or jewellery as a safety net). Yet such a data collection may face several problems:

- People may be reluctant to disclose the value of their assets, and collecting individual-level data on assets is not a trivial task: sometimes assumptions are required and complementary information is needed to allow proper interpretation, e.g. regarding direct or indirect control over a household asset.
- Sex-disaggregated data on real assets (whose actual value may have yet to be established) may be difficult to collect: usually real assets are shared at the household level and their access may not be restricted to an individual.
- Due to the time dimension of assets, such a dedicated survey should be repeated regularly over time so that the dynamics and patterns of accumulation and depletion at the individual level can be studied, especially concerning durable goods and real assets such as land and housing.

Finally, a dedicated survey may preclude the possibility of a multidimensional analysis, since it may not collect information on such aspects as the individual situation on the labour market, the household consumption behaviour and demographic data (for example education).

If the time dimension is important, then a panel survey may be more appropriate, although more costly and more complex to realize.

Panel surveys

A panel survey, by regularly collecting sex-disaggregated data from the same panel or group of persons, is best suited to follow access to assets *over time* and therefore to capture the *use* of assets and individual patterns of accumulation, depletion and control over assets, rather than ownership alone.

The main problems with panel surveys are its costs, the complexity of following the same group of persons over time, and the fact that it is not possible to adjust the questionnaire from time to time according to the context or changing rationale.

Cross-sectional surveys

Finally, with a specific survey on access to assets it is not possible to exploit synergies among different parts of other modules (labour market, consumption, demographic, etc.) generally contained in multi-purpose cross-sectional surveys. By adding a few specific questions on individual asset ownership (disaggregated by sex), on access and control to assets to an existing multi-purpose survey, such data can be obtained relatively cheaply and can be analyzed in combination with other characteristics. What questions to include and where exactly to position them in a multi-topic questionnaire should be determined with care.

The questions in Box 4.26 are an example of such an intervention within the Living Standard Measurement Study surveys, showing how a few questions about access to land and control over

Box 4.26: Examples of potential questions on "access to land" in a Living Standard Measurement Study (LSMS)

The LSMS surveys are multipurpose surveys developed and promoted by the World Bank since 1980. They are designed to study multiple aspects of household welfare and behaviour in developing countries, and include modules on income and consumption patterns.

The LSMS surveys capture more data at the household level than at the individual level. However, it is possible to collect individual data on assets to provide a more dynamic perspective about who owns what, whether all benefits are equally shared, what happens to an asset over time, etc. by adding specific questions for each individual.

Here is an example of a few questions which could be added into the LSMS multi-topic questionnaire on access to land:

- Do you own this land?
- Do you own this land yourself or jointly with someone else? (list…)
- How did you acquire this land?
  - With regard to this land, can you sell it yourself?
  - With regard to this land, can you bequeath it yourself?
  - With regard to this land, can you use it as collateral for a loan?
  - With regard to this land, can you rent it?
  - With regard to this land, can you make improvements on it?
- What is the land primarily used for? (list…)
  - Who makes the decisions about which inputs to use?
  - Who provides labour on this agricultural land?
  - Who makes the decisions about what to sell?
  - Who keeps the revenue from the sales of the crops grown on this agricultural land?
  - Can you count on having access to this land next year?
  - Can you count on having access to this land in five years?
  - Can you be evicted from this land?

Source: *Doss et al. (2008)*.
See also: http://go.worldbank.org/WKOXNZV3X0

this asset may be collected at the individual level, even if the module is focusing on the household.

Since there is no time dimension within cross-sectional surveys, in order to analyze change the basic information on individual asset ownership and control could be complemented with other questions on personal perception of poverty, of security in case of shocks, etc. Another possible solution would be first to inquire about channel of acquisition and perception of personal control over an asset (e.g. in the future) and then ask for a title or legal document in which the timing is included.

Important information to collect

To understand gender patterns of asset ownership and thereby wealth distribution by sex, it is important to know both the *proportion* of men and women who own a particular asset as well as the *value* of the assets. Furthermore, to understand patterns of asset management and control of women and men at the individual level it is important to know also the *purpose, use and allocation* of a particular asset, i.e. if an asset is (or can be used as) a business asset or a collateral (security) for a business loan.

In general, it is necessary to collect information on individual ownership and property rights (where these are formally recognized, for example by a title) – or a situation that *de facto* is similar to an ownership according to the respondent. Information on the full set of financial and physical assets should be collected. This is important because some studies have shown that there may be a gendered pattern of asset ownership among husbands and wives and that women's vulnerability and bargaining power may be related to the timing of assets ownership as well as their fallback options.

At the household level, this implies documenting whether assets are owned individually or jointly, how assets were acquired, what is their current value and the rights that individuals have over each type of assets (how decisions are made about sale, etc.) and who receives the benefits (income, rents, dividends, etc.) generated by each asset. However, it is important to ask for any documentation only at the end of the survey. If it is done earlier it may preclude the respondent from giving any information about ownership that is *de facto* similar to an ownership but without the title.

4.10 Information and communication technology

4.10.1 What it is

Information and communication technologies (ICTs)[31] are the hardware, software, networks, and media used to collect, store, process, transmit, and present information in the form of voice, data, text, and images. They range from telephone, radio, and television to the Internet.[32] "Engendering ICTs" is the process of identifying, assessing and eliminating gender inequality in the access to and use of ICTs, as well as of adapting ICTs to the special needs, constraints, and opportunities of women and men.

4.10.2 Why it is important

Women and men need ICTs for the same reasons: to access and utilise information for themselves, their families, their work, and their communities. ICTs give women and men a voice in their lives, their community, their government, and the larger world. Women and men need ICTs to function in a digital and virtual world.

A key reason for gathering and disseminating ICT statistics by gender at country level is to inform national policy and to set international policy goals. Without sex-disaggregated data, there is no understanding of gender issues in ICT and it is therefore difficult to make priorities in developing polices. Furthermore, such data articulates the case for the inclusion of gender issues in ICT policies, plans and strategies for policymakers.

ICTs offer women and men abundant opportunities to develop and expand projects. Information may be globally accessed which may alleviate the isolation of many women and men living in remote places, and facilitates all kinds of cultural, economic, political or social contacts and associated networking. Social organizations (such as women's movements) are increasingly using Internet tools such as web pages, e-mail, and forums.

Accessing ICT involves potentially gender-specific barriers such as high access costs and technology choice, access to learning new skills, perception of ICT as a "male" sector, geographical access factors, family status, age, and religion.

According to the ICT Toolkit, there are several benefits of ICT for women, such as:

- Increased access to jobs and income-generating activities
- New opportunities for employment
- Increased access to information
- Expanded opportunities for communication
- Reduced time demands on women and girls.

The benefits can contribute to women's empowerment by counteracting the barriers associated with isolation, limited mobility, and other cultural and social norms. They can translate into women's enhanced ability to participate in the political process and to advocate for their needs.

4.10.3 The value-added of statistics

Comparable data on ICT are needed to understand its nature and its role in women's and men's lives and to ensure the inclusion of gender issues in ICT. In order to respond to this at a fundamental level policy-makers require a clear statistical understanding of the impact and value added of ICT in women's and men's day-to-day activities. Statistics on ICT can be used effectively to:

- Provide political leaders with information to develop and implement ICT polices with an engendering approach at the national, regional and local levels
- Assist governments in forming legislation and policies that respond to developments in ICT
- Include a gender perspective in the debate and the preparation of national ICT strategies and fully involve women in the development of e-governance systems at a decision-making level
- Provide detailed data on the nature, extent and dynamics of economic, social and overall impact of ICT on women's and men's day-today activities
- Encourage the development of gender mainstreaming in ICT in order to ensure affordable access for disadvantaged women and men, such as those living in rural areas,

[31] The term "information technology" (IT) tends to be used inter-changeably with information and communication technologies (ICTs). The latter recognizes the multiple technologies involved as well as the ubiquitous convergence of communications with information technology.

[32] *Engendering ICT Toolkit: Challenges and Opportunities for Gender-Equitable Development.* See http://www.developmentgateway.com.au/jahia/Jahia/pid/7027

single mothers or fathers, elderly people, and people with disabilities

- Understand what are the dynamics that could optimise the ICT benefits and gains to a society, and particularly to empower women and men in their participation in the labour market
- Develop further women's and men's capacity to use ICT for entrepreneurship and business development
- Assist ICT policies to achieve their potential for serving human development needs by analysing not only how women and men benefit from ICT, but which women and men benefit most (class, age, rural/urban location, race, religion, etc.)
- Assist educators in the training of service providers of ICT to women and men
- Launch an on-going process of preparing national reports[33] to assess the situation of women and men as ICT users, producers and decision-makers
- Develop a role model for women and men and examples of best practice in the area of ICT. Include women as leaders and decision-makers in the ICT area
- Raise awareness on gender-related barriers to ICT access.

Box 4.27 provides an example of data from the Eurostat survey on ICT Usage.

Box 4.27: Eurostat ICT Usage Surveys *

Eurostat conducts two annual surveys on ICT Usage in EU countries: one on enterprises and one on households and individuals. The household surveys provide data on access and use of computers and the Internet since 2003, together with socio-demographic background characteristics.

According to the 2006 *Community survey on ICT usage in households and by individuals*, men are more regular users of both computers and the Internet than women in nearly all EU countries. Around 54% of men aged 25-54 in the EU used a computer daily, or almost daily: 7 percentage points more than the proportion of women. Though more men than women use computers daily in most countries, there are eight EU countries – Bulgaria, Czech Republic, Estonia, Latvia, Lithuania, Hungary, Poland and Slovakia– where the reverse is true. Looking at Internet use, around 43% of men aged 25-54 used the Internet daily, or almost daily, as compared with 34% of women. The proportion of women exceeds that of men only in the three Baltic States.

In the follow up the recommendations from the Beijing Conference (European Commission (2000b), more men than women also report having a relatively wide range of basic ICT skills in all countries: the gap between men and women is even wider in respect of basic computer skills than in the use of ICT. Around a third of men aged 25-54 but only 18% of women were recorded as having high basic skills. (It should be kept in mind that the ICT skills were measured using a self-assessment approach, where it was the respondent who indicated whether he/she was able to carry out specific tasks related to computer).

In the 16-24 age group, the EU gender gap is slightly smaller both in the use of computers and of the Internet (5 percentage points) but similar in ICT skills. Women and men use the Internet for different purposes: in the three months preceding the survey, 74% of women and 72% of men aged 16-24 used the Internet for communication purposes, in many cases for sending and receiving e-mails. But twice as many men than women in this age group used the Internet for downloading software (38% vs. 19% of women), and significantly more young men than women used it for playing or downloading games and music (56% vs. 39% of women). On the other hand, more young women than men used the Internet for formal education purposes, for arranging travel and accommodation (31-32% for both activities vs. 27% of men), as well as for seeking health information (25% vs. 10% of men).

* Source: Eurostat 2008. See also : *http://ec.europa.eu/eurostat/ict*

[33] For an example of such reports, see http://www.cso.ie/releasespublications/pr_it.htm

4.10.4 Implications for data collection

Possible sources

There are four main sources used to collect data on ICT use, access and demand (Me & Sicat, 2004). They are:

1. Telecommunications operators and Internet service providers (ISPs)
2. Enterprise surveys
3. Household surveys, and
4. Web-based user surveys.

Telecommunications operators and ISPs. One of the sources from which countries can collect data on ICT access and use - such as on standard access lines, integrated services digital networks (ISDNs) and mobile phone networks - are telecommunications operators. Surveys on ISPs for example can provide information on Internet subscribers (business or household), type of technology used (dial up, cable, WAP, etc.) and length of connection. Data compiled from the largest telecommunications operators can provide information on Internet subscription by country. These sources look at the provider side but do not reveal information on the actual use of the technology.

Enterprise (or business) surveys[34] provide information on enterprise ICT use. In countries with sufficient resources, NSOs may conduct a full ICT-specific enterprise survey. The Eurostat Enterprise Survey on ICT Usage, based on a model survey developed by the OECD, collects information on: (1) an enterprise's ICT systems; (2) Internet use; (3) e-commerce via Internet; (4) e-commerce via computer-mediated networks other than the Internet; (5) confidence-building practices for Internet commerce; and (6) barriers to e-commerce. Alternatively, NSOs can add ICT-specific questions to existing enterprise surveys.

Household surveys[35] on ICT usage provide sex-disaggregated data on individuals' ICT use, such as how frequently a person uses a computer, what he/she uses the Internet for, and what types of items he/she buys online. As with the enterprise survey, a country may conduct a full ICT-specific household survey or add a module on ICT to an existing survey. The OECD has also developed a model survey on household ICT usage on which the Eurostat Household Survey on ICT Usage is based. (See Box 4.28 for examples of questions included in such a survey.) In addition to gender, surveys of this type can provide data on other socio-demographic variables such as age, education level, employment situation, type of household, and income, and show how usage differs between men and women. An ICT survey module conducted in Ireland[36] in 2003 showed that while women accounted for around 43% of persons using the Internet for private use purchases, this proportion rose to 81% for purchases of food items and fell to 15% for purchases of computer hardware.

Web-based surveys of Internet users, carried out by national agencies or market research companies, are another source of data.

Administrative records[37] can also provide gender specific ICT data such as information on the gender patterns of enrolment in IT studies or employment in the ICT sectors. But the quality of the data provided depends on the coverage and content of these records and registers.

Each of these data sources has strengths and drawbacks. Because data from telecommunications operators and ISPs are aggregate estimates, they provide limited information on individual ICT user patterns and are not sex-disaggregated. The changing nature of the ISP industry can also make such data very inaccurate. Still, they are useful, especially for countries for which no other data are available. Enterprise surveys provide valuable information on ICT use patterns among businesses.

But as currently designed, they reveal little about the unique conditions faced by women and men entrepreneurs, the characteristics of women's and men's enterprises, or women's and men's ICT usage preferences. Because they are based on direct responses from interviewees, household surveys are a very good source of sex-disaggregated data on men's and women's patterns of ICT use. Web-based surveys may not be based on standard methodologies; however, for some countries, they may be the only source of sex-disaggregated data.

[34] For more details on this type of source, see section 3.3.4

[35] For questionnaire examples, please see Further reading section. For more details on this type of source, see section 3.3.3.

[36] http://www.cso.ie/qnhs/documents/qnhsictmodule.xls

[37] For more details on this type of source, see section 3.3.5.

Box 4.28: ICT Questions from the Central Statistical Office (CSO) Ireland ICT Questionnaire (Q1 2006)

Direct interviews of all persons in the household aged 16 to 74.

Examples of questions asked, interviewer notes not included below.

Which of the following computer related activities have you already carried out?

1. Copying or moving a file or folder
2. Using copy and paste tools to duplicate or move information within a document
3. Using basic arithmetic formulas in a spreadsheet
4. Compressing files
5. Connecting and installing new devices, e.g. a printer or modem
6. Writing a computer program using a specialized programming language
7. None of the above

Where or how did you learn to carry out these activities?

1. School, college or university
2. Training courses in an adult education centre (not organized by employer)
3. Vocational training course organized by employer
4. Self-study using books, CD ROMs, etc.
5. Self taught i.e. learned by doing
6. Informal help from colleagues, friends, relatives etc.
7. Some other way

Which of the following Internet related activities have you already carried out?

1. Using a search engine to find information
2. Sending e-mails with attached files (documents, pictures etc.)
3. Posting messages to chat rooms, newsgroups or an online discussion forum
4. Using the Internet to make telephone calls
5. Using peer-to-peer file sharing for exchanging movies, music, etc.
6. Creating a web page
7. None of the above

Have you used the Internet in the last 3 months for any of the following activities?

1. Sending or receiving e-mails
2. Telephoning over the Internet/Videoconferencing
3. Other communication-related activities (use of chat sites etc.)
4. No, none of the above

Have you used the Internet in the last 3 months for any of the following activities?

Note: This question relates to Internet use for private purposes only

1. Finding information about goods and services
2. Using services related to travel and accommodation
3. Listening to Web radios/watching web television
4. Playing/downloading games, images and/or music
5. Downloading software
6. Reading/downloading online newspapers/news magazines
7. Looking for a job or sending job applications
8. Seeking health-related information (e.g. injury, disease, nutrition, improving health etc.)
9. No, none of the above

Have you used the Internet in the last 3 months for any of the following activities?

Note: This question relates to Internet use for private purposes only

1. Internet banking
2. Selling goods or services (e.g. via auctions)
3. No, none of the above

Have you used the Internet in the last 3 months for any of the following activities relating to training and education?

Note: This question relates to Internet use <u>for private purposes only</u>

1. Formalized educational activities (school, university etc.)
2. Post educational courses
3. Other educational courses related specifically to employment opportunities
4. No, none of the above

When did you most recently buy or order goods or services for private use over the Internet?

1. Within the last 3 months
2. Between 3 months and a year ago
3. More than 1 year ago
4. Never bought or ordered

What were the main reasons for not buying/ordering any goods or services for your own private use in the last 12 months?

1. Have no need
2. Prefer to shop in person/ like to see product/ loyalty to shops/ force of habit
3. Lack of skills
4. Delivery is a problem (it takes too long etc.)
5. Security concerns or privacy concerns, i.e. worried about giving credit card or personal details over the Internet
6. Trust concerns, i.e. concerned about receiving and/or returning goods, complaint/ redress concerns
7. Don't have a payment card allowing payment over the Internet
8. Speed of the Internet connection is too slow
9. Other

What goods and services did you order over the Internet for private use in the last 12 months?

1. Food/Groceries
2. Household goods (e.g. furniture, toys, etc.)

Continued on next page

Box 4.28: ICT Questions from the CSO Ireland ICT Questionnaire (Q1 2006) (continued)

3. Films/music
4. Books/magazines/ newspapers /E-learning material
5. Clothes/sports goods
6. Computer software and upgrades (including computer and video games)
7. Computer hardware
8. Electronic equipment (incl. cameras)
9. Share purchases/Financial services/Insurance
10. Travel or holiday accommodation
11. Tickets for events
12. Lotteries or betting
13. Other

Of the products that you ordered over the Internet, were any of the following downloaded or accessed from websites rather than delivered by post etc.?

1. Films, music
2. (Electronic) books magazines, newspapers, e-learning material
3. Computer software (including computer and video games and software upgrades)
4. None of the above

Would you be interested in using the Internet instead of having personal contact with public services/ authorities?

1. Yes, I already use the Internet for this purpose
2. Yes, but I do not currently use the Internet for this purpose
3. No

What are the main reasons that you do not use the Internet to deal with public services/ authorities?

1. Services are not available or difficult to find on-line
2. Personal contact is missing
3. Immediate response is missing
4. Concerned about protection and security of my data
5. There are extra costs involved (e.g. connection costs)
6. Using the Internet for this purpose is too complicated
7. None of the above

Which of the following matters relating to public services/ authorities are you already using the Internet for?

1. Income taxes
2. Job search services
3. Social welfare applications
4. Personal documents e.g. passport or driver's license
5. Car registration
6. Application for building permission
7. Police reports (e.g. reporting a theft)
8. Public libraries e.g. catalogues and search tools
9. Requesting certificates of birth and marriage
10. Enrolment in higher education or university
11. Change of address announcements
12. Health-related services e.g. hospital appointments
13. Other

What are the main reasons for this household not having access to the Internet at home?

1. Have access to Internet elsewhere
2. Don't want Internet (because content, harmful, etc.)
3. Don't need Internet (because not useful, not interesting, etc.)
4. Equipment costs too high
5. Access costs too high (telephone, etc.)
6. Lack of skills
7. Physical disability
8. Privacy or security concerns
9. None of the above, but other

What types of Internet connection are used?

1. Modem (dial-up access over normal telephone line) or ISDN
2. DSL (e.g. ADSL, SHDSL, etc.)
3. Other broadband connection (e.g. cable UMTS, etc.)
4. Mobile phone over narrowband (WAP, GPRS, etc.)
10. Don't know

How to improve gender-sensitive ICT data[38]

Improvements in the collection and dissemination of gender-sensitive data at national and international level could include the following:

1. Development of a framework for gender-sensitive ICT indicators

This would help to translate policy needs into statistics, enable benchmarking the current situation and measurement of trends over time. It means building a statistical foundation for indicators distinguishing the unique ways that ICTs are used by and impact upon women and men. This framework would need to be drawn from a close examination of how the underlying dynamics operating in ICTs impact on women's and men's unique conditions and circumstances. The framework should include a core set of gender-sensitive ICT indicators that are measurable in official statistics. The selected indicators if not currently available would help national statistical offices to identify priority

[38] This section is based on the paper by Me & Sicat (2003).

areas where the collection of ICT sex-disaggregated data could be improved and included in the regular statistical production of a country. Existing ICT indicators are usually on a general level and the consideration of gender-specific purposes or uses have so far not been a key factor in the selection of questions for surveys.

In developing such a framework, differences between countries must also be considered. It is possible that the same model may not apply to all countries, though it is important to identify similarities and establish a common baseline and a core set of indicators. Areas that should be included in this framework are:

- Availability, access and usage of various types of ICTs at home and at work
- Knowledge and skills of ICT
- Education in the ICT sector, including access to and usage in schools
- Employment in the ICT field, including training and use of technologies in the workplace
- Gender dimension of e-business
- Gender dimension of e-commerce
- ICTs in women's entrepreneurship.

2. Development of gender-sensitive ICT modules to be included in on-going surveys

As was made clear in the responses of NSOs to the UNECE Assessment Survey, full ICT specialized household data collections are difficult to implement in countries with limited statistical resources. More efforts should be made to develop short ad-hoc modules, to be included in on-going household surveys, which ensure that ICT data can be analyzed in a social conditions context. For example, in household surveys there is often a household questionnaire and an individual questionnaire. Household questionnaires can include questions related to availability of appliances (TV, telephone, etc.). These types of questionnaire should be updated to include technologies such as computers, Internet access and mobile phones.

Existing surveys on women's entrepreneurship could also provide a great deal of information on ICT access and use among women's businesses if a module on ICT use was added. Experiences and best practices among countries using this method of collecting ICT data should be reviewed and shared, providing feedback for future recommendations in the development of the modules.

3. Beyond sex-disaggregated ICT data: identification of women and men's "niche" areas

Developing gender sensitive ICT data does not refer only to making sex-disaggregated ICT data available. The availability of sex-disaggregated ICT data is important to be able to provide gender sensitive ICT indicators. But building a system to collect gender sensitive ICT data is also a matter of identifying areas which have special bearing on women's or men's lives. Locating these areas and identifying ICT indicators which draw out these gender and societal links is useful.

The identification of women and men's "niche" areas is important, especially as they could have policy implications helping to improve the welfare of women and men. The trend of women's strong use of the Internet for health purposes which became apparent from Eurostat's household survey data could be categorized as a woman's "niche" area. The identification of such trends and "niche" areas could serve to flag potential areas for policy action. They signal to policymakers that policies, for example, on the use of public Internet sites to target women in the provision of medical services and health information could be quite useful and needed.

4. Gender-sensitive education indicators with regard to ICTs

Data on women's education in IT was among the most widely reported ICT data type by countries in the UNECE Assessment Survey. There has been discussion of the increasing need to "change women's perceptions of IT programs [so that the IT field may] consequently attract more girls and women to this field" (UNCTAD, 2002, p.74). An IT curriculum emphasizing aspects such as the role of technology in the social context, focusing on the use of IT skills on community projects and the connection of technology with "real-world" problems has been found to be more appealing to women IT students than the conventional IT curriculum. The promotion of such an IT education with a women's slant could be supported through the development of unique gender-sensitive IT education indicators reflecting the importance of the social context of the new technologies.

4.11 Education, research and science

4.11.1 What it is

Education is a means of ensuring that all people have an equal opportunity in life. Engendering education involves examining and making progress towards gender equity in the learning opportunities available for both women and men throughout their lives but particularly during their period of full-time education. It also encompasses an examination of equity in education service delivery, such as teaching and management, and curriculum content.

In the field of education, there are a wide number of inter-related aspects ranging from the level of demand for and supply of educational opportunities to the way in which people gain access to and participate in education. These aspects include the quality of the teaching and learning process, the internal efficiency of the education system, individual learning outcomes, and the impact of education on personal growth, career perspectives and the well-being of the individual, the community and the country as a whole.

Researchers are an important output of high-level education: through scientific research new knowledge can be produced whose applications may improve people's well-being, and which in turn can be passed on through education. Research often occurs in universities, but it is important also in the business sector, particularly in high technology companies, where it is commonly referred to as R&D (Research and Development).

4.11.2 Why it is important

There is a general international understanding that education is valuable, that it is a right in itself, and that it is central in promoting women's and men's rights and in achieving gender equality in society. The importance of education is recognized by all countries as a significant factor for the socioeconomic development and sustainable growth of a nation.

The social effects of education concern a variety of dimensions such as health, mortality, public life, decision-making, behaviour in terms of birth control, violence in society, etc. Comparable and comprehensive data on gender in education are required in order to develop appropriate legislation and policy aimed at:[39]

- Promoting full and equal education for women and men throughout life, with a focus on life-long learning and basic education
- Providing gender-responsive learning environments and equitable access to appropriate education programmes for all members of society
- Encouraging equal access to knowledge and career opportunities in all fields but particularly in fields such as communications, science, technology, and engineering where there is often a lack of participation by women
- Promoting the attainment of gender parity in education decision-making structures
- Fostering partnerships and dialogue between women and men, underlining the long-term gains of social transformation leading to gender-sensitive societies
- Strengthening capacities to collect and analyze sex-disaggregated statistical data, and to develop appropriate gender-sensitive indicators and guidelines in order to monitor progress made towards the achievement of international development targets relating to gender equality in education.

In addition to the formal system of education, there are informal education and training activities, which adults may undertake for work or personal development reasons. Analysis of gender distribution among participants in informal and on-the-job training may reveal important differences between men and women. For example, part-time workers, who are predominantly women, may have fewer opportunities to participate in on-the-job training. This may impact on promotion and other career opportunities.

Lack of participation in adult education or lifelong learning may be due to a number of reasons, such as busy work schedules or family responsibilities. Analysis of participation rates by gender is needed to monitor differences between women and men. For example, the Eurostat Adult Education Survey[40] revealed that more

[39] See : http://unesdoc.unesco.org/images/0013/001318/131854e.pdf

[40] http://epp.eurostat.ec.europa.eu/portal/page/portal/product_details/publication?p_product_code=KS-SF-09-044

women than men gave family responsibilities as the reason for not participating in adult education and training activities.

Research is an area where gender differences are clearly evident. Improvements in quality of life are dependent on continual scientific research. In order to develop science and its applications to the highest standards, the best human resources are needed, with contributions from both women and men (EC 2000a).

4.11.3 The value-added of statistics

The target associated with the United Nations Millennium Development Goal on gender equality and empowerment of women (MDG 3) is to eliminate gender disparity in primary and secondary education by 2005 and in all levels of education by 2015. Access to and graduation from the various levels of education is thus closely monitored in all countries.

Good quality statistics can allow national policy-makers to see at a glance how their country is positioned relative to other countries, and allow them to anticipate future trends in areas such as subject choice, teaching and management structures. Time series analysis can also reveal which countries have reversed trends in these statistics.

Most countries can produce a wide array of statistics on examination results. However, less widely available are statistics on drop-out rates and on the cultural and economic factors causing early school-leaving. With few exceptions, girls are more likely than boys to be missing from classrooms across the developing world. Girls who do enrol in school often drop out when they reach puberty for many reasons – the demands of household responsibilities, a lack of school sanitation, a paucity of female role models, child marriage or sexual harassment and violence, among others (UIS, 2010). In many countries, women have lower literacy rates than men.

In EU countries, the opposite is true with boys more likely to be early school leavers than girls (in 2007, 17% of boys and 13% of girls aged 18-24 were early school leavers). Among OECD countries, upper secondary graduation rates are higher for women (87%) than for men (79%). There are also more women with a first (e.g. Bachelor's) or second (e.g. Master's) tertiary-type A degree (58% and 56% respectively), whereas there are fewer women at the highest level of education: only 45% of advanced research qualifications (e.g. Ph.D.) are awarded to women. Once in employment, men can expect to spend more hours in non-formal job-related education and training than employed women.

The MDG3 target on reducing gender disparities in access to education is associated with the concern for the disadvantages faced by females. But once in school, are there any gender disparities in achievement? The concern of underachievement in education is not only for females but also for males, in particular in reading achievement. For example, girls had significantly higher average scores in reading than boys in all countries participating in the Programme for International Student Assessment (PISA) in 2006. On the other hand, in most OECD countries boys outperform girls in mathematics, even though the gender difference is smaller, and the picture is mixed in science. But the limited gender differences in science performance have not been reflected in equal choices to study science later on.

The reduction in the gender imbalance in the number of graduates in mathematics, science and technology is part of one of the EU's Education and Training benchmarks for 2010.[41] Although progress has been made in the traditional disadvantage of women in scientific subjects at the end of compulsory schooling, much still needs to be done in order to make science and mathematics attractive choices for women as well as for men in tertiary education (UNICEF, 2009).

Concerning subject choice, gender differences are visible from secondary level, when students begin to specialize in subjects. In Ireland, for example, only 0.5% of girls took engineering as a higher level Leaving Certificate examination subject, compared to 12.8% of boys. Boys accounted for more than 90% of candidates in technical drawing and construction studies. In contrast, 31.4% of girls took home economics compared to just 3% of boys. The effect of differentiation in specialized subjects at this early stage of the education cycle is likely to be carried into tertiary education and employment choices.

The same pattern is present in other countries. For example, while overall in OECD countries women represent 54% of the population of new entrants in tertiary education in 2006, women predominate among new entrants in 'health and

[41] See: http://europa.eu/scadplus/leg/en/cha/c11064.htm

Box 4.29: Relative share of women & men in a typical academic career (head counts), EU-27 2002 and 2006

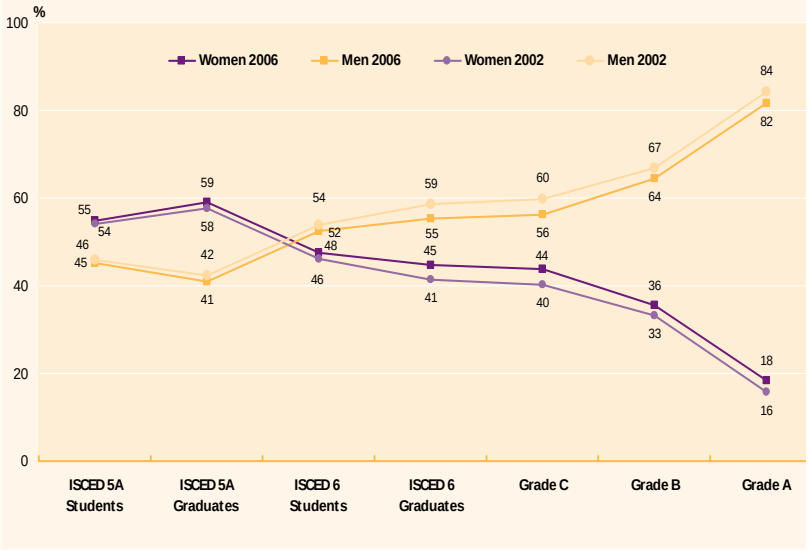
Grade A – The single highest grade/post at which research is normally conducted

Grade B – Researchers working in positions not as senior as top position (A) but more senior than newly qualified PhDs (C)

Grade C – The first grade/post into which a newly qualified PhD graduate would normally be recruited.

ISCED 5A – Tertiary programmes to provide sufficient qualifications to enter into advanced research programmes & professionals with high skills requirements

ISCED 6 – Tertiary programmes which lead to an advanced research qualification (PhD)



Source: Education statistics (Eurostat); WiS database (DG Research); Higher Education Authority for Ireland (Grade A). Taken from European Commission (2009b).

welfare' (75% are female) and 'humanities, arts and education' (68% are female). Women are in the majority but less strongly represented in 'social sciences, business and law' (55% are female). Sciences attract a smaller proportion of women. Only 22% of new entrants in 'engineering, manufacturing and construction' and 24% in 'mathematics and computer science' are women. Female students are better represented in 'life sciences, physical sciences and agriculture' (50%). Among graduates, the gender breakdown by field of education is very similar as among new entrants (OECD, 2008). These differences contribute to occupational segregation in the labour market (see also section 4.2).

Concerning teaching and management structures, across the EU there is a general trend for women teachers to significantly outnumber men in early childhood and primary education, for a better balance at secondary level, and then for men to be in the majority at tertiary level (see Box 4.29). In many countries, there are also more men who are school principals compared to the proportion of male teachers. Lifestyle choices and income remuneration are some of the key factors determining these trends.

Among researchers, women still make up less than a third of researchers in Europe as well as in all other world regions except for Latin America and the Caribbean (with 46% women) and Central Asia (around 50% women). In the Commonwealth of Independent States (CIS) the share of women among researchers is 43%, compared to 30% in the EU/EFTA countries. In Africa this figure was just 5.8% in Guinea in 2000 whereas it was 56% in Lesotho in 2004[42]. The situation in the private sector is even worse than in the public sector.

While female participation is increasing among researchers overall, progress remains slow and is almost static in some fields. Also, increased participation overall is not being reflected as much in increased participation at senior levels, with a continuous drop in the numbers of women at each level of the academic ladder and only 18% women in grade A academic positions (full professors and similar) in the EU in 2006 (see Box 4.29).

[42] http://www.uis.unesco.org/template/pdf/EducGeneral/Infosheet_No4_Gender_EN.pdf

4.11.4 Implications for data collection[43]

Data required for measuring gender disparities in education can be collected from different sources using a variety of existing methods of collection. Essentially, the data sources may be categorized by individual persons and educational institutions. The individual persons in this respect refer not only to the students and teaching staff, but can also include the parents, other members of the same family, community leaders, employers, etc. The educational institutions, although most often referring to the schools and universities, may also cover adult education centres and other places of learning/training. The methods of collection may include regular school surveys, administrative reporting, Population Censuses, and household surveys. Each of these methods has proved to be effective for collecting specific types of education statistics (see Box 4.30). However, whether a survey or administrative records could be used to measure school attendance rates would depend on the situation in each country.

Data gathered from regular school surveys and Population Censuses are essential for obtaining a general overview of gender differences in educational access, participation, and performance. More focused additional data are necessary to study the reasons for inequalities in order to identify appropriate measures to reduce disparities. It may be interesting to identify reasons for drop-out, low school attendance, low participation by women in technical subjects, and to analyze other elements such as children and community needs, parents' perceptions and expectations, etc. Similarly, information is needed about aspects of the supply of education, e.g. public policies, resources allocation, and school infrastructure.

In most developing countries, girls and women are worse off than boys and men as regards access to and participation in schooling, as shown by an analysis of gender disparities in intake (entrance) rates into primary education and enrolment ratios. It is of interest to examine the behaviour of girls as compared to boys once they are in school, i.e. whether they tend to remain in school more or less than boys.

Box.4.30: Methods of collecting education data

Method	Type of education statistics
Population Censuses	Educational attainment School attendance Fields of study Illiteracy
Household surveys	Additional data on illiteracy and educational attainment Household educational expenditures Qualitative data Other topics (reasons for drop-out, parents' expectations or opinions etc.)
School surveys	Pupils by sex, age, grade, field of study, ethnicity Assistance for students with learning difficulties Conditions of schools, equipment, facilities Learning achievement
Administrative files	Educational expenditures Teachers' salaries Principals and teaching staff by sex and age Examination results

School survival is given by the estimated percentage of a cohort of pupils who have entered grade 1 in a given year and eventually complete the final grade.

While in the majority of developing countries overall gender parity in education is far from being achieved, progress is being made quite fast in some developed countries, and in some countries of Latin America and the Caribbean region. However even in countries where overall parity in access is achieved, large disparities appear in the distribution of male and female students among the different fields of study in technical and vocational and in higher education, as we saw earlier. These disparities can be measured by using the index of gender segregation by fields of study, which is defined as the percentage of all persons enrolled at a given level of education who would need to change their field of study if the ratio of females to males were to be the same in all fields (assuming that there is no change in the total enrolment).

[43] This section is based on UNESCO (1997).

In making inter-country comparisons there is a need to take into account the overall level of an indicator as well as gender inequalities (gender gaps and parity indices – see example in Box 4.31). If the overall value is the same, more inequality will evidently indicate a worse social situation. But the question is more complex when the overall or mean values are different. In Haiti, for example, the overall literacy rate is 43%, with 46% for males and 40% for females. Should this social outcome be judged as better or worse than that of Chad, which has an overall literacy rate of 45%, with 59% for males and 31% for females?

In order to answer this type of question, synthetic indicators have been proposed integrating the gender-equity dimension in the measure of absolute achievement. UNDP has developed a gender-equity-sensitive indicator (GESI), which utilizes the harmonic mean between the male and female indicators (Anand & Sen, 1995). The harmonic mean has the property of taking into account both the value of the overall ratio as well as, to a certain extent, the disparity between males and females.

Gender statistics in research and science: measuring inequality

Science and technology (S&T) represent important domains for gender statistics, since they provide information about the share of women and men in the more knowledge-intensive sectors of the labour market. Unlike education statistics, research statistics have in the past been more focused on the financial side.

Following publication of a Communication on Women and Science in 1999 which called for more and better sex-disaggregated statistics in the field, a European Technology Assessment Network (ETAN) on Women and Science (EC, 2000a) presented a report entitled *Science policies in the European Union – Promoting excellence through main-streaming gender equality* in 2000. Among its conclusions was the view that a precise overview of the situations of women scientists in Europe required a concerted improvement in the availability of reliable, accessible, harmonised data on researchers broken down by sex.

The Directorate General for Research at the European Commission therefore launched an annual data collection in 2001 for 32 countries[44] through the Statistical Correspondents, a sub-group of the Helsinki Group of Women and Science. In 2006, the collection of sex-disaggregated statistics on researchers was extended to include breakdowns by sector, field of science, and economic activity (NACE) for the business sector in the common R&D Survey by Eurostat and OECD. There are also other breakdowns in the Survey, such as qualification, citizenship and age. Furthermore, the UNESCO Institute for Statistics also collects and disseminates these variables in Head Count and Full-time Equivalent units for non EU/OECD countries. The definitions for human and financial resources in research are given in the Frascati Manual (OECD, 2002b) which provides the basis for Surveys on R&D.

However, a significant effort is still needed in many national data collections to provide the comprehensive information requested from a global perspective. A number of countries with large research populations such as Australia, Canada, China, Mexico and the United States still do not have data on the total number of researchers by sex.[45] Often the reason for this is that there is no sex-breakdown for the business enterprise sector. Where data are available, it is possible to see that men are more likely than women to concentrate in sectors and fields with higher levels of R&D intensity (Eurostat 2004b).

In addition to R&D and education data, Eurostat and OECD also compile data on employment in science and engineering, *Human Resources in Science and Technology (HRST)*. This category is broader in the sense that it includes not only researchers but also other S&T occupations, including, for example laboratory assistants. The HRST data are derived from Labour Force Surveys where the sex-breakdown is usually assured, but sample sizes may not always be large enough to allow a breakdown by both sex and other variables at the same time.

[44] EU-27 plus Iceland, Israel, Norway, Switzerland, and Turkey
[45] UNESCO (2006). UIS S&T database in Feb. 2010.

Analysis of these data in larger countries does however provide a broader view of how well labour markets are providing S&T occupations for different tranches of the labour force, according to level of qualification. Guidelines for HRST are to be found in the Canberra Manual[46] which was first published by the OECD in 1995. The results presented in *She Figures 2009* show that among the EU-27 countries, 58% of women who have successfully completed education programmes at the third level in a Science and Technology (S&T) field of study are employed in an S&T occupation (ISCO-2 Professionals and ISCO-3 Technicians), whereas this is the case for 55% of men. This indicator serves as a broad initial benchmark against which to interpret data on women researchers.

The OECD, the UNESCO Institute for Statistics and Eurostat are also in the process of undertaking a joint survey on the careers of Doctorate Holders[47] which will yield internationally comparable indicators on the careers and professional mobility of PhD holders[48].

Box 4.31: Gender parity in education index

One of the indicators used to measure progress towards gender parity in education is the Gender Parity Index (GPI) of the Gross Enrolment Ratio for each level of education. The GPI is the ratio of female to male enrolment ratios. A Gender Parity Index close to 1.00 (between 0.97 and 1.03, according to the Education For All Global Monitoring Report) indicates parity at the given level of education.

When gender disparities in favour of girls exist, there may be a number of explanations:

- At the primary level, the advantage may appear to be in favour of girls because countries are enrolling a greater number of girls than boys who have previously not enrolled in school. Countries where gender disparities in favour of boys have tended to exist over many years will have a greater "backlog" of girls to educate now, which will result in GPIs in excess of 1.03.
- At the secondary level, the advantage may appear to be in favour of girls in some cases because they have moved on more rapidly than boys from primary education(whereas boys tend to repeat more often in primary); in other cases, it is because young men move on more rapidly from secondary education than young women, either into the world of work or to other – often more prestigious – streams of education (including higher levels or educational provision abroad). In some countries, it may be because more girls have undertaken further studies than boys at the secondary level and that boys have dropped out of the education system.

Source: *UNESCO, Education for All in least developed countries, 2006. http://unesdoc.unesco.org/images/0014/001472/147259M.pdf*

As in labour markets in general, men and women tend to be clustered in particular sectors and fields of science. For example, throughout the European Union where 30% of all researchers are women, 39% of researchers in government research institutions are women and only 19% of researchers in the business enterprise sector are women.

Concerning the R&D investment intensity, men are more likely to concentrate in areas with higher levels of funding (Eurostat 2004b). Across the fields of science, women researchers tend to cluster in social and medical sciences and are less visible in natural science and engineering. This phenomenon is referred to in the literature as horizontal segregation indicating disparities along sectors or fields.

Vertical segregation, on the other hand refers to gender differentials up the career ladder. A possible method to establish whether gender inequalities exist is to use odds ratios to assess the likelihoods of men and women reaching the highest levels in their career.

For example, in 2000 in Poland there were 1,445 women full professors and 6,698 men full professors. There were also 15,378 women and 31,554 men Ph.D.holders working in academia. Assuming that the probabilities of promotion for each sex were going to remain stable for the foreseeable future, it can be calculated that based on current trends, 1 in 11 women and 1 in 4.7 men will become a full professor during their career (European Commission, 2003). Dividing the probability for women by the probability for men yields the odds that men are just over two times (2.26) more likely than women to become full professors.

[46] http://www.oecd.org/dataoecd/34/0/2096025.pdf

[47] www.oecd.org/sti/cdh

[48] http://www.oecd-ilibrary.org/oecd/content/workingpaper/5kmh8phxvvf5-en

Using data from 2007, despite an increase of nearly 500 women full professors and more than 5000 women Ph.D. holders working in academia, women's chances of becoming a full professor have declined to one in 13, and men's have increased to 5.4. So men are now 2.35 times more likely than women to become a full professor – a worsening of the odds (see Box 4.32).

Box 4.32: Odds ratios for becoming a full professor, 2000-2007[49]

	Probability of becoming Grade A for each sex (All Grades / Grade A Grade A)				Odds Ratio (Probability for women / Probability for men		Difference 2000-2007
	2000		2007		2000	2007	
	Women	Men	Women	Men			
Austria	30	6	24	8	5.2	3.2	2.0
Belgium	25	5	27	6	5.1	4.6	0.5
Bulgaria	27	8	19	7	3.5	2.8	0.8
Cyprus	84	9	46	10	9.0	4.7	4.3
Czech Republic	42	7	24	7	5.9	3.7	2.2
Denmark	34	8	23	7	4.3	3.6	0.7
Finland	12	4	11	5	2.7	2.5	0.3
France	8	3	8	4	2.5	2.3	0.2
Germany	45	10	38	11	4.4	3.6	0.8
Greece	9	3	13	4	2.7	3.2	-0.5
Estonia	17	5	22	5	3.5	4.7	-1.2
Iceland	7	2	6	2	3.1	2.3	0.8
Israel	7	3	5	2	2.8	2.0	0.7
Italy	7	3	6	3	2.5	2.2	0.3
Latvia	27	6	19	6	4.7	3.1	1.6
Lithuania	56	8	51	8	6.8	6.7	0.0
Netherlands	40	7	28	7	5.7	4.2	1.5
Norway	18	5	7	3	3.6	2.2	1.4
Poland	11	5	13	5	2.3	2.3	-0.1
Portugal	25	9	21	8	2.8	2.7	0.0
Slovenia	9	3	8	3	2.7	2.7	0.0
Slovakia	43	6	15	5	6.6	3.0	3.6
Spain	17	6	33	10	2.7	3.3	-0.6
Sweden	9	3	20	6	2.5	3.6	-1.1
United Kingdom	27	7	20	6	3.9	3.3	0.6

[49] For detailed methodological notes, please refer to EU 2003c and EU 2009b.

4.12 Health

4.12.1 What it is

Health and medical statistics incorporate a wide variety of data, often reported on the basis of incidence and prevalence. The most common statistics reported are vital (births, deaths, marriages, divorce rates), morbidity and mortality. Other areas where statistical data are commonly reported include the demographic distribution of health status and performance of the health care system. An assessment of health care system performance includes an examination of the levels of health in a population, the distribution of health, the level and distribution of responsiveness of the health system, and the fairness in financial contributions from patients.

A comprehensive program of health statistics also incorporates analysis of the determinants of health status. The determinants of health include socioeconomic factors (poverty, psycho-social factors, employment, education, gender), lifestyles (nutrition, physical activity, tobacco, alcohol, illegal drugs), and physical environment (air quality, food safety, water, housing, work conditions, transport, climate change).

4.12.2 Why it is important

Health is one of the widest statistical domains. Periods of ill health are critical times in a person's life and citizens place trust in a society being able to provide them with an appropriate level of care irrespective of their socioeconomic situation. The importance of health as a measure of the development of a country is indicated by the inclusion of various health and health determinant measures among the eight Millennium Development Goals (see 1.3 and Box 1.2).

The provision of health care is expensive. Hence it is important for Governments to have a comprehensive range of relevant health statistics available to inform and to monitor health policy. Typical goals of public health policy measures include:

- Reducing incidences of disease and disability, and increasing life expectancy particularly among children
- Ensuring early intervention to prevent the development of serious illnesses
- Promoting healthy lifestyles and providing a basic education in good health practices; and
- Developing health systems that are equitable and responsive.

Some health problems are of more relevance to men or women, for example of particular concern to women are reproductive (including maternal) health and health care for the elderly (as women have longer life expectancy than men). Since sex is a determinant of health, and risk factors are very different by sex, causes of death and other outcomes (such as disability) vary greatly between women and men. It is important to differentiate data for women and men because they will sometimes require different emphases in health policy. Adequate data on reproductive health is particularly important in developing countries, and statistics on disability are particularly important for women in countries with long life expectancies.

Different access and use of healthcare services by men and women is not always caused by biological reasons but rather by gender dimensions which should be tackled accordingly. Questions should be asked whether women have same possibilities to access the healthcare services vis-à-vis to men and whether they are treated in health care services in proportion to their need.

No less important is to have data on the actual use of healthcare services in addition to the data on the equal access. The data on the use of services can shed light on the root causes of the different usage of the services by men and women that among many reasons can include the lack of time or the lower socioeconomic conditions in which women often find themselves.

4.12.3 The value-added of statistics

Many aspects of child health are determined by *maternal health*, as well as prenatal and perinatal development, and the quality of the social and physical environments in the early years of life. Examples of relevant statistical measures in this area include delivery methods, breastfeeding, the provision of basic care for the most common childhood illnesses, affordability of child health care such as the cost of doctor and hospital visits and medicines, and healthy nutrition.

Investment in Millennium Development Goal 5, 'Improve Maternal Health' is intended to reduce chronic hunger and malnourishment (MDG 1) and improve child health (MDG 4). Two measurable

targets are defined for this goal, to reduce maternal mortality by three quarters by 2015, and to achieve universal access to reproductive health. The 23 countries in the world with the worst *maternal mortality rates* in 2006 were all in sub-Saharan Africa. Furthermore, the trends are worsening in many African countries. While a pregnant woman in Sweden had only 1 in 30,000 chances of dying, in Sierra Leone the risk was 1 in 7. WHO estimates that three-quarters of maternal fatalities and disabilities could be prevented if deliveries were to take place at well-equipped health centres, with suitably trained and skilled staff (WHO, 2005b, Ronsmans and Graham, 2006).

Less economically-developed regions tend to have the highest *death rates and birth rates*, and the lowest *life expectancy*. Women in all regions had a higher life expectancy with the highest difference among the Central and East European and CIS countries where the life expectancy of women was 14% higher than for men in 2003 (UNICEF, 1999 and 2009). There was also a wide variation in the EU between the life expectancy of men and women in 2006. The largest variation was in Lithuania where women lived 11.7 years longer than men.

It is also interesting to compare *death rates by sex within different age groups*. For example, the death rate in Ireland in 2006 was higher for males than for females in all age groups with the most pronounced difference among 15-24 year-olds, where the male rate was 2.7 times higher than the female rate, while it was between 1.3 and 1.8 times in other age groups (CSO, 2006).

An analysis of *fatal accidents at work* showed that men are well over two times more likely to be the victims of fatal accidents at work, with the construction, agriculture and transport sectors the areas with the highest rates (see Box 4.33). Overall rates of fatal accidents at work by sex need to be examined jointly with employment rates by sector for each sex, since differing employment rates and concentration of men and women by sector can partly explain differences in incidence rates.

Another example comes from the EU Statistics on Income and Living Conditions (EU-SILC). Responses to a question on *health problems* varied widely. The rate for males suffering from long-standing illness was higher than females in all age groups. The mentioned rate for people aged 85 & over was twice the overall level for people aged 15 & over (see Box 4.34).

Box 4.33: Fatal accidents at work by sex and type of activity, EU 1994-1999

Fatal accidents at work per 1,000 employees

Category	Incidence rate
Men	53
Women	20
Construction	78
Agriculture, hunting and forestry	71
Transport, storage and communication	57
Manufacturing	45
Hotels and restaurants	37
Wholesale and retail trade	25
Financial intermediation	18
Electricity, gas and water supply	14

Source: Eurostat

An important indicator of the strength of a health system is the availability and composition of *human resources for health*. Although there is no consensus about the optimal level of health workers for a population, there is ample evidence that the number and quality of workers are positively associated with immunization coverage, outreach of primary care, and infant, child and maternal survival.

The indicators needed to describe the characteristics of the health workforce and monitor its development over time are often generated from a multitude of sources and cover many areas (such as profession, level of training and industry of employment).

The diversity of sources may require harmonization methodologies in order to produce comparable estimates of the health workforce for each country. Human resource health indicators are typically expressed as a rate per 1,000 of the population of the following health workers:

- Physicians
- Nurses
- Midwives
- Dentists
- Pharmacists
- Public health workers
- Community health workers
- Laboratory health workers

Box 4.34: Health problems by sex and age group, EU 2005

Percent of cohort responding "Yes" to the following question:

"Do you suffer from long-standing (chronic) illness or condition (health problem)?

Problems that are seasonal or recurring should be included"

Age group	Females	Males
Total 15 & over	**29.1**	**32.9**
15-24	10.5	11.6
25-34	14.4	14.8
35-44	19.7	21.7
45-54	30.2	32.0
55-64	43.2	44.5
65-74	53.1	56.7
75-84	61.3	64.3
85 & over	63.7	67.6

Source: EU SILC

- Other health workers
- Health-management and support workers

Health financing is a critical component of health systems. National health accounts (NHA) provide a large set of indicators on the basis of expenditure information collected within an internationally recognized framework. NHA are a synthesis of the financing and spending flows recorded in the operation of a health system, from funding sources to the distribution of funds between providers, and functions of health systems and benefits across geographical, demographic, socioeconomic and epidemiological dimensions. Indicators of interest include:

- Total health expenditure as a percentage of GDP
- Percentage of total general government expenditure that is spent on health
- Per capita total expenditure on health at the Purchasing Power Parity dollar rate (making allowance for differences in price levels in different countries).

A key determinant of health in later life is education. Basic indicators such as *enrolment and literacy rates* show very wide variation in different regions of the World, but across the World except in industrialized countries women have lower literacy rates and received less education than men (see section 4.4).

4.12.4 Implications for data collection

Comprehensive analysis need to be undertaken to fully understand health statistics. For example, an analysis of crude death rates in the EU in 2006 for the whole population showed rates of 952 for females and 998 for males per 100,000 inhabitants. However, using standardized rates, that is, adjusting for differences in the age distribution, the rate for women was substantially below the rate for men (502 for women and 824 for men).

Box 4.35: Crude and standardized death rates by cause of death, EU27 2006

per 100,000 inhabitants

Cause	Crude death rates		Standardised death rates	
	Females	Males	Females	Males
All causes	**952**	**998**	**502**	**824**
Neoplasms	217	291	137	238
Malignant neoplasm of larynx	26	81	18	67
Malignant neoplasm of breast	36	1	25	0
Diseases of the circulatory system	428	376	201	303
Accidents	24	42	14	38
Suicide	6	19	5	17

Source: Eurostat

Some causes of death are of more relevance to one sex than the other, and age is a critical factor for some causes. Neoplasms and diseases of the circulatory system account for around two-thirds of all deaths. Men have higher rates for deaths due to accidents and suicides. Women have higher crude rates for diseases of the circulatory system but lower standardized rates after their longer life expectancies have been adjusted for (see Box 4.35).

Compiling health statistics for international comparison can often involve drawing on a wide variety of data sources, for the same indicator, and these may make use of different definitions. It is important to compare definitions and give attention to relevant metadata. An example of some commonly used health statistical measures, the rationale for using them and a brief definition of each indicator is given in Box 4.36.

Box 4.36: Definitions of some health statistical measures

Indicator	Rationale	Definition and *data sources*
Life expectancy at birth	Reflects the overall mortality level of a population.	Average number of years that a newborn is expected to live if current mortality rates continue to apply. *Vital registration, census and surveys: Age-specific mortality rates required to compute life expectancy at birth.*
Healthy life expectancy	Substantial resources are devoted to reducing the incidence, duration and severity of major diseases that cause morbidity but not mortality, and to reducing their impact on people's lives.	Average number of years that a person can expect to live in "full health" by taking into account years lived in less than full health due to disease and/or injury. *Death registration data. Estimates for the incidence, prevalence, duration and years lived with disability by major causes.*
Infant mortality rate	Under-five mortality rate and infant mortality rate are leading indicators of the level of child health and overall development in countries. They are also MDG indicators (i.e. used for monitoring progress towards the Millennium Development Goals).	Infant mortality rate is the probability of a child born in a specific year or period dying before reaching the age of one, if subject to age-specific mortality rates of that period (typically expressed per 1,000 live births). *Age-specific mortality rates among children are calculated from birth and death data derived from civil registration, census, and/or household surveys.*
Neonatal deaths	Neonatal deaths account for a large proportion of child deaths. Mortality during the neonatal period is considered to be a useful indicator of maternal and newborn health and care.	Number of deaths during the first 28 completed days of life per 1000 live births in a given year or period. *Civil registration: the number of live births and number of neonatal deaths are used to calculate age-specific rates. This system provides annual data.* *Household surveys: calculations are based on birth history - a series of detailed questions on each child a woman has given birth to during the 5 or 10 years preceding the survey. The total number of live births surveyed provides the denominator.*
Maternal mortality	Complications during pregnancy and childbirth are a leading cause of death and disability among women of reproductive age in developing countries. The maternal mortality ratio represents the risk associated with each pregnancy, i.e. the obstetric risk. It is also an MDG indicator for monitoring Goal 5 - Improve maternal health.	Number of maternal deaths per 100,000 live births during a specified time period, usually 1 year. *Vital registration, household surveys, census, health service records and specific studies on reproductive-age mortality.*
Age standardized mortality rates	The numbers of deaths per 100,000 population are influenced by the age distribution of the population. Age-standardized mortality rates adjust for differences in the age distribution of the population by applying the observed age-specific mortality rates for each population to a standard population.	The age-standardized mortality rate is a weighted average of the age-specific mortality rates per 100,000 persons, where the weights are the proportions of persons in the corresponding age groups of the WHO standard population. *Death registration data, sample registration systems, available data on child and adult mortality from censuses and surveys, together with population-based epidemiological studies, disease registers and notifications systems for the estimation of mortality for 21 specific causes of death.*

Box 4.36: Definitions of some health statistical measures

Indicator	Rationale	Definition and *data sources*
Immunization coverage for 1 year olds	Immunization coverage estimates are used to monitor immunisation services, to guide disease eradication and elimination efforts, and are a good indicator of health system performance. Measles immunization coverage is also an MDG indicator for monitoring Goal 4 - Reduce child mortality.	Measles immunization coverage is the percentage of one-year-olds who have received at least one dose of measles containing vaccine in a given year. DTP3 immunization coverage is the percentage of one-year olds who have received three doses of the combined diphtheria and tetanus toxoid and pertussis vaccine in a given year. HepB3 immunization coverage is the percentage of one-year-olds who have received three doses of Hepatitis B3 vaccine in a given year. *Administrative data: Reports of vaccinations performed by service providers are used for estimates based on administrative data service providers (e.g. district health centres, vaccination teams, physicians). The estimate of immunization coverage is derived by dividing the total number of vaccinations given by the number of children in the target population, often based on census projections.*
Presumed pneumonia	Acute respiratory infections (ARI) are responsible for almost 20% of all deaths of children aged less than 5 years worldwide. The proportion of under-fives with ARI that are taken to an appropriate health-care provider is a key indicator for coverage of intervention and care-seeking, and provides critical inputs to the monitoring of progress towards child survival-related Millennium Development Goals and Strategies.	Proportion of children aged 0–59 months who had 'presumed pneumonia' (ARI) in the last 2 weeks and were taken to an appropriate health-care provider. *Household surveys.*
Low birth weight	At the population level, the proportion of babies with a low birth weight is an indicator of a multifaceted public-health problem that includes long-term maternal malnutrition, ill health, hard work and poor health care in pregnancy. On an individual basis, low birth weight is an important predictor of newborn health and survival.	Percentage of live born infants that weigh less than 2500 g, for a given time period. Birth weight is the first weight of the foetus or newborn obtained after birth. For live births, birth weight should ideally be measured within the first hour of life before significant postnatal weight loss occurs. *Health-service statistics: the proportion of live births with low birth weight, among births occurring in health institutions.* *Household surveys.*
Obesity	The prevalence of overweight and obesity in adults has been increasing globally. An increase in body mass index (BMI) exponentially increases the risk of non-communicable diseases, such as coronary heart disease, ischemic stroke and type-2 diabetes mellitus. Raised BMI is also associated with an increased risk of cancer.	Percentage of adults classified as obese (BMI ≥ 30.0 kg/m^2) among total adult population (15 years and older). *Nationally representative household surveys, including Demographic and Health Survey (DHS).*

Source: http://www.who.int/whosis/indicators/2007compendium/en/index.html

4.13 Gender-based violence

4.13.1 What it is

Gender-based violence is perpetrated by men and women, both across the sexes and within same sex groups. Research has focused more on violence carried out by men against women, and it is this aspect that we consider primarily in this section. However, as countries develop their statistical capability in this area, data on violence by women against men, as well as common forms of violence within each sex group, such as young male violence, should also be collected.

In 1995, the Beijing Platform defined violence against women as any act of gender-based violence that results in, or is likely to result in, physical, sexual or psychological harm or suffering to women, including threats of such acts, coercion or arbitrary deprivation of liberty, whether occurring in public or private life (UN 1995a).

This definition covers a broad range of acts that can occur within the family (battering, sexual abuse of female children, dowry-related violence, and marital rape), in the wider community (rape, sexual abuse, sexual harassment, trafficking in women and forced prostitution), and by the State (including physical, sexual and psychological violence perpetrated or condoned by the State).

In 2007, the United Nations launched a campaign to prevent and eliminate violence against women and girls in all parts of the world. Entitled UNiTE to End Violence against Women[50], it brings together UN agencies and offices, as well as individuals, civil society and governments to put an end to violence against women in all its forms. The campaign has five main goals, one of which is to strengthen data collection on the prevalence of violence against women and girls.

4.13.2 Why it is important

Violence against women is a violation of women's human rights and prevents women from enjoying their human rights and fundamental freedoms, such as the rights to life and security of the person, to the highest attainable standard of physical and mental health, education, work and housing and participation in public life (UN 2006b). The long-standing failure to protect and promote those rights and freedoms in the case of violence against women is a matter of concern for all States and should be addressed (UN 1995a). Violence affects many women around the world, especially intimate partner violence, as can be seen in Box 4.37.

Violence against women impoverishes individual women and their families, as well as their communities, societies and nations at many levels (see Box 4.38). It reduces the capacity of victims/survivors to contribute productively to the family, the economy and public life. It drains resources from social services, the justice system, health-care agencies and employers. It lowers the overall educational attainment, mobility and innovative potential of the victims/survivors, their children and even the perpetrators of such violence (UN 2006b).

As a consequence, there are policy issues across the whole range of subjects that concern governments. These issues are particularly important in the area of crime, health, family, education and economic well-being**.** Violence against women exists in all societies, in all cultures and religions and in all social classes. Violence against women is a complex matter that is both a cause and a consequence of women's inequality in society.

4.13.3 The value-added of statistics

Accurate and comparable data on violence against women are needed to understand the problem and its nature, and to develop appropriate policies, legislation and services for women affected by violence. For example, gender-specific data can pinpoint those areas where the need for support services is different for women and men. Data by gender demonstrate the specific risk areas for men and women and highlight the need for targeted programs to address violence for each gender. Men's and boys' experiences of violence are different from women's and girls' in important ways. While men are more likely to be injured by strangers in a public or social venue, women are in greater danger of experiencing violence from intimate partners in their own homes. Women are also at greater risk of sexual violence. For example, results from the 2004 Canadian General

[50] http://www.un.org/en/women/endviolence/

Social Survey showed that while women and men experienced comparable overall rates of violent victimization, the rate of sexual assault for women was five times higher than the rate for men (35 per 1,000 women compared with 7 per 1,000 men). The survey also showed that women experienced more serious and repeated violence.

Box 4.37: Intimate partner violence affects many women around the world

One of the most common forms of violence experienced by women globally is intimate partner violence. A review of 50 population-based studies in 36 countries showed that the life-time prevalence of ever having experienced physical violence by intimate partner ranged between 10 per cent and over 50 per cent. Studies of femicide from Australia, Canada, Israel, South Africa and United States show that 40 to 70 per cent of female murder victims were killed by their husbands or boyfriends. Several studies across various developing countries indicate that violence during pregnancy range from 4 to 32 per cent, and that the prevalence of moderate to severe physical violence during pregnancy is about 13 per cent. The WHO multi-country study on domestic violence found that between 20 and 75 per cent of women had experienced one or more emotional abusive acts.

Source: UNITED NATIONS, 2006b

Box 4.38: The costs of violence against women *

Violence against women impoverishes not only individuals, families, communities and Governments, but also reduces the economic development of each nation.

In Canada, the annual costs of direct expenditures related to violence against women were estimated at 684 million Canadian dollars for the criminal justice system, 187 million for police and 294 million for the cost of counselling and training, totalling more than 1 billion a year.

In the UK the study examined the cost categories of justice, health care, social services, housing, legal, lost economic output and pain and suffering and estimated the resulting cost of domestic violence to be 23 billion pounds sterling per year or £440 per person.

In **Finland** estimated economic costs of violence against women include the direct costs of health care, social services, police, courts and incarceration and also the indirect costs of the value of lost lives and time lost from paid work and volunteer labour. The annual cost was estimated at 101 million euros per year, or approximately €20 per person.

A **World Bank** study estimated that domestic violence and rape account for 5 per cent of the total disease burden for women aged 15 to 44 in developing countries and 19 per cent in developed countries.

Source: *United Nations, 2006b (Paragraph 180) and Walby (2004).*

**Note: These studies each used different methods and definitions.*

Statistics on violence against women can be used effectively to:

- Evaluate the extent to which policies to reduce violence are working or not
- Make a significant and sustained impact on public awareness of the extent, nature and dynamics of sexual, physical and psychological violence against women
- Provide detailed data on the nature and extent of violence against women to criminal justice practitioners, medical practitioners, service providers, legislators and researchers
- Make available detailed data on correlations and risk markers for violence to better understand the dynamics of violence and to design prevention programs
- Develop shared ethical standards for use in research into violence against women
- Assist governments in forming legislation and policies that respond to violence against women
- Assist medical and social service agencies in the design of services for victims and offenders
- Assist judicial authorities to raise awareness among police, lawyers and judges and improve the criminal justice response to violence, and
- Assist educators in the training of service providers and others whose work brings them into contact with victims and offenders.

Policymakers and activists have called on States, intergovernmental agencies and others to develop a set of international indicators on violence against women (UN 1995a). These indicators should be based on widely available and credible data collected at the national level. These are needed for three main purposes:

- **To persuade policymakers of the need to take action to address violence against women**. The most compelling evidence has been based on household surveys that measure the extent and characteristics of different forms of violence against women. There are

numerous examples around the world in which the presentation of survey data on violence against women has galvanised political will and resulted in legislative and policy reforms.

- **To measure access and quality of services to survivors of violence**. This information is generally derived from the administrative records of the criminal justice system, health and social services or of NGOs that provide services to survivors of violence or from research on women's perceptions and use of services. Evaluation research, using both qualitative and quantitative methods, is key to assessing the effectiveness of programmes.
- **To monitor the progress of States in meeting their international obligations to address violence against women**. Relevant indicators would measure the impact of policies through changes in the prevalence and incidence of violence, progress in the establishment of legal and policy reforms and availability of services and budgetary allocations to address violence against women.

4.13.4 Implications for data collection

Over the past decade, progress has been made in documenting the extent and nature of violence against women, particularly through new surveys. While a great deal has been accomplished already, there are still challenges and gaps in developing knowledge on this issue in all parts of the world, especially in the regions where violence against women is under recognized. Some statistical challenges are due in part to the lack of standardization in methods and questionnaires, and uneven development in survey and research design.

The involvement of national statistical systems in violence against women surveys can be seen as an indication of a political will to measure the magnitude and the different forms of violence against women in a given country.

At the sixty-second session of the United Nations General Assembly, National Statistical Offices were requested to provide "data disaggregated by sex, age and other relevant information, on the extent, nature and consequences of all forms of violence against women, and on the impact and effectiveness of polices and programmes for, including best practice in, combating such violence" (United Nations 2006c).

Following up on the UN General Assembly Resolutions on this topic, the UN Statistical Commission has set up a group of countries acting as Friends of the Chair to develop indicators and other methodological standards for measuring violence against women to be implemented in national statistical systems.

A set of core indicators and guidelines for producing statistics on violence against women will be submitted to the UN Statistical Commission in 2011[51].

There are two main types of sources of statistical data: national population sample surveys and administrative statistics. Surveys dedicated to measure violence against women are better tools to collect information on gender-based violence since, if properly designed, they reflect the actual occurrences of victimization rather than what is reported to officials. Women tend to underreport sexual offences to officials and therefore statistics based on officially reported cases heavily under-estimate the phenomenon. For example, as revealed in the 2004 Canadian General Survey on victimization, only about one in three women assaulted by partners reported the assault to the police. Some factors that may discourage women to report violence, particularly domestic violence, include women not being aware of their rights and not knowing that they could be protected, mistrust in the authorities, the absence of the law or its imperfection, and gender stereotypes.

Administrative statistics

Relevant administrative statistics on violence against women can be obtained not only in the area of criminal justice, but also in health, civil law, housing and in other agencies that help victims. While these statistics cannot be used to determine the actual rate of violence against women, it is important to be able to assess the contribution that these systems make to address violence against women. For example, changes in levels and types of reporting may provide data on changes in willingness to report and confidence in the justice system.

It is difficult to harmonize all definitions across administrative systems since they are embedded in local laws and procedures. However, additional collection of data on items such as the relationship,

[51] See http://unstats.un.org/unsd/demographic/meetings/vaw/default.htm for further details

if any, of the victim of a violent assault to the perpetrator, would enable statistics to be collected on domestic violence without the need to change the legal categories of crime.

Detailed information is needed about the court response to violence against women, including convictions or acquittals, type of sentence, treatment ordered, bail granted or denied, charges reduced, supports for victims provided at court, and protection orders. Counts of repeat offending and repeat victimization are needed to assess the effectiveness of criminal justice systems responses.

Information on the number of women presenting to hospitals for medical treatment for injuries resulting from violence is needed as an indicator of the severity of the problem, demand for health services resulting from violence, and the portion of health costs that are due to violence.

Surveys

Survey research on violence against women has been carried out within general victimization surveys, but the inadequacies of these surveys in addressing violence against women led to the development of specialized surveys. National-level surveys on violence against women, especially those conducted by national statistical institutes, have been undertaken in countries of the UNECE region only since the mid 1990s.

There are currently on-going efforts of international organizations and institutes to support the implementation of internationally comparative surveys dedicated to violence against women by encouraging the use of a standard survey methodology. Two important examples of multi-country efforts of dedicated surveys are the International Violence against Women Surveys (IVAWS),[52] and the WHO Multi-Country Study on Domestic Violence and Women's Health.[53]

In victimization surveys, the focus is on obtaining current reliable estimates of victimization rates[54]. In contrast, the most critical issues in surveys that measure violence against women relate to the definition of violence, the identification of violence typologies, the disclosure by victims, the recognition of groups at risk, information on perpetrators of violence and the different patterns of violence in its several forms. "Lifetime" and "the last 12 months" are the most commonly used reference periods to study violence against women (UNECE-UNODC 2010).

Work is ongoing in UN to develop a survey module on violence against women that could be used in different countries to collect data on the core indicators identified by the UN Statistical Commission's Friends of the Chair group[55].

Surveys, while being the best vehicle to collect information about violence against women, have significant collection and definitional issues. In planning surveys, particular attention should be devoted to:

- How to ask women about their experience with violence and how to design the questionnaire so that women are asked about violence in an indirect way
- The reference period of victimisation (lifetime, previous 6 months, one year, five years)
- Definition of study population (women over 18, 15-49, 15-65, ever married, ever partnered)
- What information should be collected on the victimisation event
- How to assure the safety of women, make sure that the data remains confidential and that women will not be affected by revealing their experiences of violence.

Refusals are likely to be the main element of non-response in violence against women surveys. Issues that affect refusals include: wording, length of the interview, sensitive nature of the survey topic, survey method, as well as time availability of the respondents. Experience has shown that surveys with the lowest non-response rates are those that make use of advance letters, call-backs, and follow-ups. The use of proxy interviewees is problematic when dealing with such sensitive and personal information. Attention needs to be given to preserving the privacy and safety of respondents and interviewers if non-response is to be kept to acceptable levels. Women should be interviewed when they are alone. Confidentiality

[52] See http://www.heuni.fi/12859.htm

[53] See WHO (2005) and http://www.who.int/gender/violence/who_multicountry_study/.

[54] For general guidelines on victimization surveys, see the UNECE-UNODC manual on victimization surveys at http://www.unodc.org/unodc/en/data-and-analysis/Manual-on-victim-surveys.html

[55] See http://www1.unece.org/stat/platform/display/VAW/Measuring+violence+against+women;jsessionid=A6E340ACFF14A52FBDA4EBE35C6BF7E3 for further information on the survey module

from her family and even from the interviewer assists disclosure.

A broad range of information on the type of violence should be collected and it should not be limited to rape and partner violence. The severity and frequency of incidents should also be obtained. The relationship between victim and perpetrator is a key category for classifying the types of violence. The majority of surveys measure intimate partner violence, which is defined as violence perpetrated by current and former spouses, cohabiting partners, dates, and boyfriends. Many surveys have the objective to identify all perpetrators, including those who are not intimate partners. Perpetrators should be differentiated by classification characteristics such as age, sex and type and length of relationship with the victim.

Surveys need to ask about experiences with violence in behavioural terms, not simply whether respondents have been the victims of 'violence' or have ever been 'assaulted' or 'sexually assaulted' (see Box 4.39 for an example). Providing multiple opportunities for disclosure will help to counter the reluctance or hesitance of many women to talk about their experiences. Single questions have been shown to undercount rates of partner violence and sexual violence, which women are naturally reluctant to discuss. Multiple questions may also elicit links between different types of violence. For example, the 2004 Canadian GSS survey found that there was a correlation between emotional abuse and spousal violence.

There is evidence that interviewers' characteristics and training contribute to data quality, easier disclosure of respondents' experience of violence, improved confidentiality of the information and safety of the respondent.

Box 4.39: An example of behavioural questions to identify women affected by physical violence from a Finnish survey

"Has your current partner sometimes behaved violently against you (over the last 12 months or earlier)", such as:

1. Threatened you with violence?
2. Prevented you from moving or grabbed you?
3. Slapped you?
4. Thrown a hard object at you?
5. Beaten you with a fist or a hard objects, or kicked you?
6. Strangled or tried to strangle you?
7. Shot at you or stabbed or cut you with an edged weapon?
8. Beaten your head against something?
9. Pressured, coerced or tried to coerce you to have sex with him?
10. Behaved violently against you in some other manner?

Source: *Piispa & Heiskanen (2005); Straus (2007).*

Experience with interviews on violence against women has shown that, despite the sensitivity of the topic, it is possible for interviewers to collect reliable and valid information on violence against women, provided they are sensitive to the issue and have received appropriate training. There is also a responsibility on the part of survey managers to prepare for and to respond to emotional trauma on the part of interviewers who might become distressed by repeatedly hearing stories about violent victimization. It is important that the WHO ethical and safety recommendations (see Box 4.40) are carefully taken into consideration.

Interviewers will generally not know in advance when a woman is approached for an interview if she has had violence in her life or if she is currently living with a violent partner. Interviewers have an ethical responsibility not to endanger a woman whose violent partner may learn of the nature of the interview. Through training and experience, interviewers can detect whether respondents have the necessary privacy to continue through to questions about violence and are able to speak freely and safely.

Both reliability and validity will be affected if respondents interpret question wording differently to other respondents or if large numbers fail to disclose incidences of violence against them. If large numbers of women refuse to report honestly on their experiences of victimisation then violence will be undercounted. It is therefore necessary to develop innovative approaches that are sensitive to the women responding and give respondents options as to when and how to participate, thus encouraging participation and candid disclosures of violence.

Very few violence against women surveys are conducted on a regular basis: most are *ad hoc* surveys. While these are important in providing benchmark data, it is also important to be able to measure changes over time. However, the need for time series data may be in conflict with the need to introduce evolving international standards in data collection.

A survey that is dedicated to violence against women is likely to produce the best methodology. Against this, it is cheaper to append a module on violence against women to a survey that is already established.

If ad hoc modules are to be appended to ongoing surveys, then the ongoing survey should deal with similar topics (e.g. health, victimisation). A full-scale survey should be preceded with adequate pilot testing of the methodology and of the questionnaire.

The need to develop a sample that is representative of the population as a whole is especially acute in the field of violence against women, since the women who are the most heavily abused are likely to be marginalised and socially excluded in other ways. In most cases the surveys are limited to adult respondents. It is often not possible to include younger respondents on legal or ethical grounds.

A survey methodology does not lead itself to addressing important forms of violence against women, such as trafficking and forced prostitution. Women in these situations are not easily available to be interviewed and will require specially targeted studies as opposed to random surveys of the population.

Box 4.40: WHO Ethical and Safety Recommendations for collecting data on violence against women

- The safety of respondents and the research team is paramount, and should guide all project decisions.
- Prevalence studies need to be methodologically sound and to build upon current research experience about how to minimise the under-reporting of violence.
- Protecting confidentiality is essential to ensure both women's safety and data quality.
- All research team members should be carefully selected and receive specialised training and on-going support.
- The study design must include actions aimed at reducing any possible distress caused to the participants by the research.
- Fieldworkers should be trained to refer women requesting assistance to available local services and sources of support. Where few resources exist, it may be necessary for the study to create short-term support mechanisms.
- Researchers and donors have an ethical obligation to help ensure that their findings are properly interpreted and used to advance policy and intervention development.
- Violence questions should only be incorporated into surveys designed for other purposes when ethical and methodological requirements can be met.

Source: *WHO (2001)*.
See also http://www.who.int/gender/violence/en/womenfirtseng.pdf

4.14 Gender attitudes

4.14.1 What it is

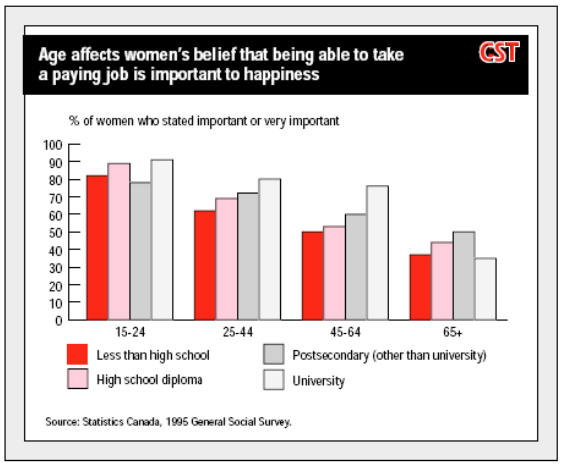
Attitudes can be measured across most topics, for example, whether men and women have different attitudes to crime, health service delivery, environmental issues such as recycling and sustainable development, education and learning, money management, and relationships. Gender attitudes often refer to the specific attitudes which people have towards women's and men's roles in society (which will determine their opinions on such issues as "Is it equally important for boys and girls to receive an education?" "Do women and men make equally good political leaders?" "Is the role of women in society to be good mothers and wives?"). Attitudes constitute both an important factor creating gender patterns, as well as a powerful reflection of gender patterns in society. However, despite the importance of attitudes in relation to gender, national statistical institutes seldom measure them.

4.14.2 Why it is important

Attitudes are dynamic and constantly changing. Our ideas and experiences shape the world around us and, in turn, the world shapes our ideas and experiences. Attitudes can vary significantly by sex, age, and level of education. These characteristics are interrelated and what may seem to be a gender difference may be due to other socio-demographic differences. This can be particularly true for attitudes. Thus, while it can be difficult to determine which factors have the greatest impact on people's views, an understanding of attitudes, and of the values behind those attitudes, is essential if policy initiatives are to successfully influence attitudes in order to promote gender equality.

Gender attitudes in all aspects of human life are important to study and understand. In recent years there has been a transformation in the world of work, which has had profound consequences for individuals, households, and wider society, as people attempt to reconcile work, family lives, and social life. It is important to measure the attitudinal barriers that society and people place in the way of facilitating these changes.

The attitudes of women on some issues appear to be more closely related to age than to educational attainment. A Canadian survey[56] found that young women were more likely than their older counterparts to respond that being able to work for pay is important or very important to personal happiness, regardless of their educational background. For example, among women who had attended university, 80% of those aged 15 to 24 held this view, compared with 35% of women aged 65 and over (see figure below). Results of the survey also revealed that men's views on this subject tended to be similar across all ages and levels of educational attainment.



4.14.3 The value-added of statistics

While national statistical offices measure outcomes, such as employment rates and educational attainment, most do not measure the attitudinal factors influencing these outcomes. Attitudes and opinions play a role in maintaining gender inequalities, thus should be measured adequately and regularly. Their relevance for policy development, implementation and evaluation in many domains would justify more investment in this direction. Stereotype attitudes and traditional beliefs play an important role in attempts to change, or to withstand changes, in gender relations.

Attitudinal measures on specific national policy items could be useful to inform policy-makers to what extent new initiatives might get broad acceptance or which initiative may need intense efforts to attract support. For example, regarding attitudinal data on female participation in decision-making issues, measuring the general level of support for initiatives like preferential policies can be useful to develop implementation strategies. The attitudes of decision-makers themselves to increasing the representation of women at senior decision-making levels are also of relevance. Only by measurement can efforts to change attitudes on female leadership be evaluated.

At the European level, since 1973 the European Commission has been monitoring the evolution of public opinion in the Member States through the standard Eurobarometer survey conducted 2 to 5 times a year, in order to help the preparation of texts, decision-making and the evaluation of its work.[57] Special Eurobarometer reports are based on in-depth thematical studies carried out irregularly for various services of the European Commission or other EU Institutions and integrated in Standard Eurobarometer's polling waves. These investigate topics such as agriculture, biotechnology, energy, environment, gender roles, family, youth, elderly, health-related issues, immigration, poverty, regional identity, science and technology, working conditions, consumer behaviour, urban traffic etc. An example is the special Eurobarometer survey on *European citizens' attitudes towards nuclear energy and radioactive waste*, conducted in 2008 (as a follow up to similar surveys conducted in 1998, 2001 and 2005). While 54% of males were in favour of energy production by nuclear power stations, only 34% of females were.

Box 4.41 presents an example of a survey on attitudes towards learning conducted in Canada. Box 4.42 describes a survey on gender opinions in South Africa. A survey on gender attitudes conducted in Azerbaijan is briefly described in Box 4.43.

[56] http://www.statcan.ca/english/kits/pdf/social/women2.pdf

[57] http://ec.europa.eu/public_opinion/

Box 4.41: Survey of Canadian Attitudes towards Learning

The *Survey of Canadian Attitudes toward Learning* is conducted annually since 2006 by Statistics Canada in collaboration with the Canadian Council on Learning to assess Canadians' needs, opinions and knowledge concerning learning and education. The survey covers learning themes of current importance: early childhood learning, structured learning (elementary, secondary and post secondary), and adult or work-related learning. In 2006, also learning on health-related issues was covered.

- *Early Childhood Learning* and *Structured Learning* focus on the goals, quality, and priorities of formal education.
- *Adult Learning/Work and Learning* seeks to answer questions, such as: What motivates adults to engage in work-related education and learning? What keeps them from participating in work-related learning? What are the differences between adults who do and those who do not engage in work-related learning?
- *Health and Learning* pertains to how Canadians learn about health in general; where they get their information in relation to particular health issues; and to a lesser extent, what motivates people to learn about health.

The results of the survey are of considerable interest to those who help to plan policies and services in the area of learning and education. The survey helps identify knowledge gaps that exist and leads to a deeper understanding of attitudes towards learning among Canada's population.

Source: *http://www.ccl-cca.ca/SCAL2009/* and *http://www.statcan.gc.ca/cgi-bin/imdb/p2SV.pl?Function=getSurvey&SDDS=5122&lang=en&db=imdb&adm=8&dis=2*

4.14.4 Implications for data collection

Attitudes may be difficult to measure. Usually the respondent is asked whether he/she agrees or disagrees with various statements on an issue – possible answers often including *Strongly Agree, Agree, Neither/Don't know, Disagree, Strongly Disagree* (often referred to as a Likert five-point scale). Answers to the set of statements are sometimes combined to create an attitude scale for the issue in question. Sometimes the neutral answer/middle category is not given so that respondents are induced to take a position, or at least it is not read out in interviews but is only recorded if the respondent spontaneously uses it. The choice of the set of items to use, question wording and order can be even more important in a survey on attitudes than it is in a survey concerning experiences and facts. Statements often elicit socially desirable answers rather than a true reflection of the respondent's attitude. There is also no proof as yet that the responses to a series of statements concerning attitudes are a good predictor of behaviour.

An example of a list of statements used to measure gender attitudes comes from the Netherlands. The Dutch government believes that attitudes are an important determinant of structural inequalities in power between women and men, and has therefore run several campaigns over the years to raise awareness and change attitudes. Towards the end of the decade, the government developed an Emancipation monitor and arranged for a special survey focused on a range of emancipation-related issues. Respondents had to indicate where they agreed, disagreed, or were neutral in respect of each of the following statements:

- When a woman invites a man for a drink, after an evening out, this often means that she would like to have sexual intercourse
- If a woman says no to sexual advances, she means no
- If a man gives a gentle slap on the buttock of a woman, it is a compliment for her
- In sexual intercourse a man should take the initiative
- If a man is married or has a steady relationship with a woman, he has a right to have sexual intercourse with her
- Too often boys and men impose their will in sexual relations
- Nowadays women interpret men's behaviour too soon as sexual harassment
- When a man beats his wife, he should leave the house and not the woman (as is most often the case)
- In cases of domestic violence, the position of the police should be one of reticence.

In most countries, the national statistical office is unlikely to organise a survey that focuses only on gender attitudes. An example of questions used at the European level comes from the European Social Survey (ESS). The central aim of the ESS is to gather data about changing values, attitudes, attributes, and behaviour patterns within

Box 4.42: Measuring gender opinions in South Africa

Four years after the end of apartheid, in the second half of 1998, South Africa's first national gender opinion survey was undertaken. The survey was conducted by a non-governmental organization on behalf of the Commission on Gender Equality, a constitutional body with the mandate of monitoring gender equality in the country. A total of 1,752 individuals aged 18 years and above were interviewed in the course of fieldwork. The survey was preceded by ten focus groups to test the design of the questionnaire. The survey collected a range of demographic information as well as facts relating to the situation of the individual. These allowed for comparisons of opinions of different groups of women and men, as well as providing a snapshot of the situation in respect of key gender practices. The main body of the instrument investigated the situation and opinions of women and men on culture, tradition and religion; division of labour; decision-making; social needs; rights and the law; sexuality; and constitution, governance and politics.

Europe's social, political and moral climate.[58] This survey intends to measure and explain how people's social values, cultural norms and behaviour patterns are distributed, the way in which they differ within and between nations, and the direction and speed at which they are changing (EC 2006b and 2006c).

Data collection takes place every two years, by means of face to face interviews of around an hour in duration. The questionnaire consists of a 'core' module lasting about half an hour - which remains relatively constant from round to round - plus two 'rotating' modules, repeated at intervals, each devoted to a substantive topic or theme. The themes covered in the core modules are: Trust in institutions; Political engagement; Socio-political values; Moral and social values; Social capital; Social exclusion; National, ethnic, religious identity; Well-being, health and security; Demographic composition; Education and occupation; Financial circumstances; and Household circumstances.

Relevant to gender concerns, a rotating module within the ESS survey focused on the inter-relations between work, family and well-being. It dealt with the implications for personal well-being of changes in the nature of work and in the nature of family and household structures. Everyday experiences of combining work and family obligations are crucial for the life satisfaction and psychological well-being of European citizens. The aim of the module was to provide insights into current issues of work, family and well-being and into the interactions between them. The module included the following questions about family and work:

- To what extent is it possible to combine modern working life with family life in Europe?
- In what way, and how much, do the possibilities of and problems in combining family and work correlate with job, family, and personal life satisfaction?
- How do the modern family and job structures affect gender relations?
- To what extent do national policies (such as care service and parental leave schemes) enable men and women to reconcile work and family life?
- Do socio-economic and ethnic-based inequality in employment opportunities and working conditions on the one hand, and family arrangements on the other, influence social cohesion?
- To what extent do job histories, and family events and structure, create social and economic resources and influence the health status and life satisfaction of people during retirement ages?

Another example on the attitudes towards work and family life and women's roles is from Canada. In the 1995 General Social Survey, the following questions were asked of a representative sample of the Canadian population:

- In order for you to be happy in life, is it very important, important, not very important or not at all important to be able to take a paying job either outside or inside the home?
- Can you tell me if you strongly agree, agree, disagree or strongly disagree with each of the following statements?
  - An employed mother can establish just as warm and secure a relationship with her children as a mother who does not work for pay.
  - Having a job is the best way for a woman to be an independent person.
  - Both the man and the woman should contribute to the household income.

[58] The European Social Survey, http://www.europeansocialsurvey.org/

- A pre-school child is likely to suffer if both parents are employed.
- A job is all right, but what most women really want is a home and children.

4.15 Minority groups

4.15.1 What are they

Within most countries there are groups of people with specific ethnic, cultural, linguistic and/or religious backgrounds that differ significantly from the bulk of the population. Such groups are often referred to as minority groups as they represent, in each case, a relatively small proportion of the total population.

Females and males within a particular group may differ from their counterparts in the rest of the population in terms of their roles, characteristics and social and economic circumstances. They may also differ from each other in ways that contrast with the rest of society or other minority groups.

In many countries, statistics reflecting the realities of women and men belonging to minority groups are scarce. This is despite the growing interest of national, regional and international bodies in both minority and gender issues and significant progress in some countries in producing gender-relevant data on minority groups. Part of the explanation may be due to the measurement challenges that emerge when a joint perspective on gender and minorities is adopted.

4.15.2 Why they are important

Statistics on the situation of women and men belonging to specific ethnic, religious or national groups are needed to increase visibility and understanding of the social and economic issues, including gender issues, affecting these groups and the lives of their members. Such data are particularly important because gender issues within minority groups are located at an intersection that risks being overlooked by those focusing on gender concerns in general, as well as by those focusing on minority group concerns. The data are essential for raising awareness - both among policymakers and the general public - of the complex interaction between these different dimensions, and for developing coordinated policies and programs to address both areas of concern (see section 1.3).

The ethnic and cultural composition of the population has become increasingly diverse in many countries, largely as a consequence of recent and past migration flows. Reflecting this, data on population groups with particular ethnic, cultural or migration characteristics are of increasing relevance to many countries in understanding the cultural diversity of the population and the position of these groups within society. Such data are important in determining and monitoring migration, integration, anti-discrimination and minority group policies.

For example, migrant settlement issues and outcomes are often an important policy focus as people arriving under some migration programs or from particular countries may face more difficulty than others adjusting to a new way of life in an unfamiliar environment. The wellbeing of indigenous peoples is a further area where the policy focus has sharpened in some countries, reflecting concerns over the circumstances and life chances of these individuals and greater appreciation of their unique cultural heritage.

Gender issues within population sub-groups like these, can vary considerably and the availability of gender-related data is crucial to orient policies as well as to facilitate mutual understanding and cohesion across these groups and the wider community. Reliable gender-relevant indicators need to be produced on a regular basis not only for the mainstream population but also for minority groups.

Policies addressing gender issues in general, such as programs to increase gender equality in

Box 4.43: Azerbaijan survey of gender attitudes

The Azerbaijan Human Development Report 2007 presents findings of the first national survey of gender attitudes ever carried out in Azerbaijan (or any other CIS country), in 2005. The Report aims to identify gender attitudes and analyze their impact on gender equality in the country, thereby stimulating public debate on the status of men and women in Azerbaijani society and encouraging national policy action for ensuring greater gender equality.

The countrywide survey targeted 1,500 respondents. 80 focus-group interviews were conducted as well as in-depth interviews with more than 50 experts (e.g. government officials, public figures, representatives from non-governmental organizations, and gender specialists). The Report was produced by the United Nations Development Programme in collaboration with the State Committee for Family, Women and Children's Issues of the Republic of Azerbaijan, with financial support from the Government of Norway.

Source: UNDP Azerbaijan (2007).

employment or education, or to support families, do not necessarily bring the same outcomes in the mainstream population and in minority groups. For example, women in these groups might have special difficulties that are not targeted by such policies. Detailed data are therefore needed to tailor policies that can effectively address gender issues of minority groups.

On another aspect, gender roles are important in facilitating communication and integration between the various minority communities and/ or between the mainstream population and specific groups. For example, public debate often focuses on the role of women within specific migrant or ethnic communities, and the implications of this role for relationships between the various communities. Statistical evidence is needed to provide sound data to inform such debate and to underpin related policies.

4.15.3 The value-added of statistics

In most cases, gender-relevant data on minorities are important to show the extent to which women and men belonging to various minority groups are more or less disadvantaged when compared with each other or the rest of society. They may suffer disadvantage not only because they are members of the minority group but also because of their gender.

For example, statistics on employment or income based on sample surveys may be available for the population as whole and, in many cases, for population groupings formed from dissections such as sex, age, country of birth and family type. Aggregates compiled at this level, however, can hide important differences between women and men belonging to minority groups, not only with respect to the mainstream population but also between minority groups.

With the aim of creating a database on the status of the Roma population, UNDP conducted a 'Vulnerable Groups Survey' in 2004. The survey, one of the efforts of the Decade of Roma inclusion (an explicit commitment by nine governments in Central and South-Eastern Europe to combat Roma's poverty, exclusion and discrimination), revealed that the data collection methods tended to lack gender-sensitive approaches and appropriate ethnic dimensions. Box 4.47 lists the main suggestions for improvement.

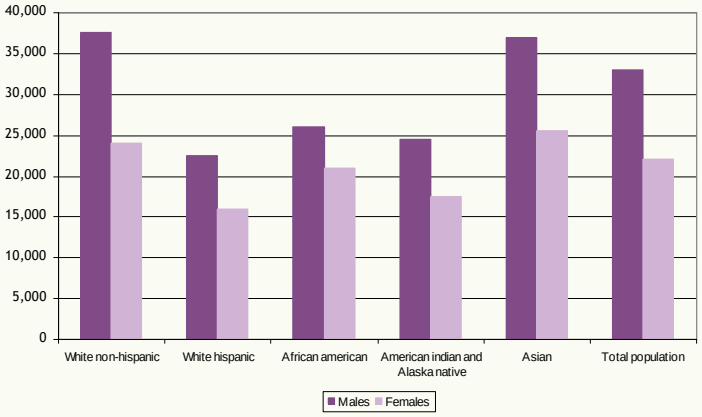
The following three country examples show the importance of collecting and disseminating gender-relevant data for minority groups. Box 4.44 provides an example from the United States showing the relevance of both gender and ethnicity to monitoring earnings levels and patterns in that country, as these two dimensions jointly operate as a social stratifier in the United States. Box 4.45 relates to unemployment rates of ethnic groups in the United Kingdom. It shows once again that gender patterns within ethnic communities can be very diverse.

Box 4.46 compares the long-term health conditions of Australia's Indigenous women with those of Indigenous men and non-Indigenous women. It illustrates one of many areas where survey data has shown that Indigenous people experience disadvantage compared with the wider population, with the extent of this disadvantage varying by gender.

This kind of information can assist in identifying gender-sensitive approaches to address the disadvantage and in targeting government programs to those most in need.

Box 4.44: Median annual earnings by sex and ethnicity, United States 2005 (US Dollars)

In the total population of the United States, men had higher annual earnings than women in 2005 and this held true for every ethnic affiliation: in particular, women of the most disadvantaged group, the white Hispanics, had the lowest earnings level. However, the pattern by gender was very diverse: for example, two groups with similar earnings levels – African Americans and American Indians/ Alaska Natives – showed quite different gender pay gaps: for the former, the percentage difference between men's and women's average earnings was 20% while for the latter it was 28%. Moreover, both in relative and absolute terms, the highest pay gap was registered in the mainstream population (white non-Hispanic) while African Americans had the smallest divide between men and women.

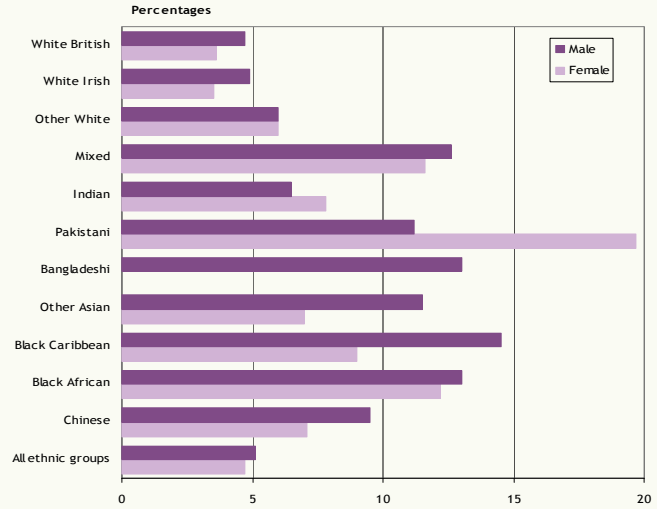


Source: *US Census Bureau http://www.census.gov/acs/www/*

Box 4.45: Unemployment rate by sex and ethnicity, United Kingdom 2004

Although the total unemployment rate in the United Kingdom was relatively low (below 5%) in 2004, with little difference between the two sexes, there were remarkable differences within and between ethnic communities. In particular, women of the Pakistani community suffered from a high unemployment rate (20%), especially if compared with the unemployment rate of men of the same group (11%). On the other hand, there were ethnic groups where men experienced a much higher unemployment rate than women, as in the case of Black Caribbeans, where unemployed men were 14% of the male labour force whereas the corresponding figure for women was 9%.

Source: *Office for National Statistics, United Kingdom*



Box 4.46: Long-term health conditions of Indigenous women, Australia 2004-05

Australia's Indigenous population represents 2.5% of the total population, based on 2006 Population Census results. Various data sources can be used to compare the circumstances and outcomes of Indigenous women and men, both with each other and with non-Indigenous people.

For example, Indigenous women's health can be compared with that of Indigenous men and non-Indigenous women using data from two surveys conducted by the Australian Bureau of Statistics in 2004-05: the National Aboriginal and Torres Strait Islander Health Survey and the National Health Survey. Among the findings from comparisons of long-term health conditions were:

- 85% of Indigenous women aged 18 years and over reported at least one long-term condition compared with 77% of Indigenous men.
- The prevalence of multiple conditions was also higher among Indigenous women, with 68% reporting two or more long-term conditions compared with 58% of Indigenous men.
- After adjusting for age differences between the two populations, Indigenous women were more than 10 times as likely as non-Indigenous women to have kidney disease; more than four times as likely to have diabetes /high sugar levels; and nearly twice as likely to have asthma.

Source: ABS 2007a

Box 4.47: The 2004 UNDP 'Vulnerable Groups Survey' on Roma Population

The 2004 UNDP 'Vulnerable Groups Survey' has probably been one of the biggest surveys ever conducted on the Roma population. The survey interviewed some 8,273 households consisting of Roma as well as of the non-Roma population in the countries of South-East Europe. The survey used identical questionnaires and followed identical sampling and methodological guidelines in all countries.

In order to overcome some of the challenges in collecting data on gender and ethnicity, the following suggestions and recommendations for improvement were put forward for consideration:

- Collect gender and ethnically sensitive data together
- Statistical institutions need to have the capacity to provide necessary guarantees on the privacy and use of the data
- Legal frameworks need to balance the protection of privacy (individual data) and the need of anonymous ethnic data for policy analysis
- Existing data collection systems need to be sensitized to issues regarding ethnicity and gender for example by:
  - sufficiently disaggregating existing data
  - developing adequate indicators that capture a wider context
  - complementing data collected with the household as the unit of measurement
  - involving the ethnic community in the collection of data
  - modifying existing questionnaires or creating new ones with emphasis on gender and ethnic sensitive questions.
- Cooperation and partnership between data producers and users is necessary
- Compliance with quality standards for data (reliability, consistency, usefulness) must be ensured
- Develop methodologies to complement registry data with survey based instruments complementing ethnic dimensions to the specific topic studied.

Source: UNDP (2006)

4.15.4 Implications for data collection

Definition and identification of minority groups

Various factors can hinder data production on minorities and they have to be dealt with to produce good quality data on gender and minorities. At the most fundamental level, the minority groups of interest need to be defined in a way that facilitates their identification. While determining one's gender status is relatively easy, defining minority status is much more complex.

There is no generally accepted definition of a 'minority group' and the term itself is not used in the statistical outputs of many countries. Different countries or regions use different approaches to define and identify the small groups within their populations for which statistics are required. User priorities are important in deciding which groups should be separately identified and the types of statistics to be produced. Gender perspectives are invariably important for each separately identified group.

The groups of interest may be defined by reference to a person's ethnic affiliation, racial or ethnic origin, indigenous origin, ancestry, language, migration status or religious affiliation. They may also be defined by reference to other personal factors that reflect policy priorities or social issues in the particular country (e.g. people who have a disability, lone mothers and fathers, long-term unemployed persons, elderly women and men, prisoners, same-sex couples etc.).

In the field of international migration alone, there are many ways of identifying and classifying population groups (as described below) and many of the groups overlap. Each group is relevant for analyzing different aspects of the migration and integration process and represents a possible target of different programs and policies. The size of each group depends on the country, its legislation and its migration history.

Overlaps between groups are also common in other fields. For example, affiliation with certain ethnic groups is distinct from affiliation with language or religious groups and from membership of particular groups based on ancestry. Individuals are frequently members of a range of different groups when these different aspects are considered. The combined collection and analysis of data on groups with several ethno-cultural and/or migration characteristics can be particularly informative for the understanding of cultural diversity.

Criteria used to identify certain types of groups

For purposes of discussion in the rest of this section, minority groups are confined to those that are based on a person's ethnic, cultural or migration characteristics. Two main approaches tend to be used in defining and identifying minority groups of this kind: those based on subjective criteria, and those based on objective criteria. Sometimes a mixture of the two approaches is used.

Subjective criteria approaches

An approach based on subjective criteria is centred on self-declaration of individuals. Self-declaration is usually the best option when trying to identify population groups with homogeneous cultural traits. It may also be the only option for identifying some groups, such as indigenous peoples, in many countries. However, it also presents some disadvantages, such as changing perceptions of belonging to a certain minority group, across individuals and across time, which can have an impact on comparability of data. Moreover, the sensitivity of questions on ethnicity or religious affiliation can also have an impact on data quality.

In the context of the 2010 round of Population Censuses, the Conference of European Statisticians recommends that the collection of data on ethno-cultural characteristics should always be based on the free self-declaration of a person, as such information is generally subjective and sometimes sensitive (UNECE 2006). Questionnaires that seek data on ethnicity, language, religion, etc, should therefore include open questions to allow identification of small groups. Respondents should also be free to indicate more than one ethnic affiliation or a combination of ethnic affiliations if they wish to do so. In order to guarantee the free self-declaration of ethnicity, respondents should also be allowed to indicate 'none' or 'not declared'.

Objective criteria approaches

Where minorities are linked to immigration flows, an objective approach based on a person's migration background may be used in identifying the relevant groups. In this case, the groups may be identified on the basis of recorded personal characteristics such as country or place of birth, country of birth of parents, year of arrival in host country, and/or citizenship. These characteristics are usually perceived as being not sensitive. Moreover, they are relatively stable across time and easy to understand by respondents. While they do not necessarily mirror the ethno-cultural background of respondents, they may sometimes provide a useful proxy for this if it is not feasible to seek self-declarations by individuals. However, the identification of members of third and subsequent generations would be possible only through information on grandparents.

In relation to identifying migrant groups, the Conference of European Statisticians' recommendations for the 2010 Population Censuses provide helpful guidance on the topics on which data should be collected, the mode of collection, and issues to be addressed in question wording (UNECE 2006b).

Box 4.48 summarizes the main advantages and disadvantages of the two basic approaches to defining and identifying minority groups, i.e. migration background and ethno-cultural status of individuals.

Box 4.48: Advantages and disadvantages of basic approaches for identifying minority populations

Approach and identification criteria	Advantages	Disadvantages
Migration background *(objective criteria approach)* • Country of birth • Region of birth • Country of birth of parents • Citizenship	• These topics are usually not sensitive, are easy to collect, compile and disseminate and are often readily available. • When a foreign country is reported, these concepts reflect a migration process that individuals or their parents undertook. • Citizenship may also detect groups that have higher probability of discrimination due to legal barriers.	• Being born in a foreign country or having a foreign parent or citizenship does not necessarily indicate minority status. • These concepts may not reflect the cultural background of individuals. • No possibility of identifying third and subsequent generations.
Ethnic and cultural characteristics *(subjective criteria approach)* • Race • Ethnicity • Ancestry • Religion • Language	• Based on self-declaration. • Better identification of population groups with similar cultural and/or ethnic background.	• Topics based on racial and ethnic status, or religious affiliation, can be highly sensitive. • Multiple affiliations can be difficult to capture. • Subject to change with time and between generations.

Other approaches

It is also possible to use self declarations on ancestry, or ethnic or cultural origin, in combination with information on country of birth and country of birth of parents, to obtain a good indication of the ethnic background of first and second generation residents of a country. This information can be essential in some countries for effective delivery of services to particular ethnic communities.

Where a country has a generally accepted standard question for identifying a particular group (e.g. indigenous people), the standard wording should be used wherever possible to obtain data for that particular group. This facilitates complete and consistent recording in different data sources as well as comparisons across topics and over time.

Data sources for measuring small population groups

For purposes of gender analysis of minority groups, data are needed about the lives of their women and men members. This requires, for each group, data on sex cross-classified by a range of demographic and socio-economic variables such as age, employment characteristics, educational status, access to resources, health conditions and outcomes. As minority groups represent small – sometimes very small – proportions of the total population, this poses methodological challenges for data collection.

The main kinds of sources used to collect this information are Population Censuses, household sample surveys, and administrative records. Some of the methodological challenges are common to all these sources, such as defining the minority groups of interest and developing appropriate questions to consistently identify and classify their members. Other challenges vary with the data source. The country context invariably has a major effect on how these challenges are addressed.

Population censuses

When questions to identify minority groups are included in a Population Census, this source can provide very accurate data to measure the social and economic status of the female and male members of each group. It can also provide data at fine levels of geography and for particular localities, which can be important for analyzing minority group issues within different communities. However, intervals between censuses are generally quite long (e.g. 10 years) and censuses typically do not cover social and economic topics in much detail.

Household sample surveys

Household sample surveys can usually provide data more frequently than Population Censuses and more comprehensively in terms of the topics covered. However, sample size and sample design are crucial issues. For example, minority group status indicators may be included in a survey but, unless the sample is sufficiently large or has some special design features, it may not be able to capture reliable sex-disaggregated data for small population groups.

In some cases it may be possible to use regular household surveys to provide useful gender-relevant data on some minority groups. For example, by adding appropriate minority status identifiers and/or question modules to Labour Force Surveys, some countries have been able to produce a limited amount of data on the characteristics and experiences of selected groups such as migrants or indigenous people. Care is needed in using samples designed for other purposes in this way, as the more detailed results may not be statistically significant due to the small number of individuals representing the minority group in certain sample cells. There may also be other data quality issues specifically related to the group.

Sometimes the sample size and/or design for a particular survey can be adjusted in order to produce reliable results for minority groups. For example, over-sampling from some areas or minority groups may be possible, allowing the collection of representative data for those groups. A survey's coverage may also need adjustment if minority groups tend to be concentrated in geographic areas or dwellings not usually enumerated. There may also be implications for a survey's sampling frame: if the existing frame does not adequately reflect the relevant minority groups, its updating will be essential.

Where data on a particular group is a high priority, some countries conduct special surveys of people belonging to that group. In these cases sample designs, sample sizes, survey coverage, topic content, questions, enumeration practices, etc. can be tailored to the task of producing relevant and reliable data for the group. The outputs can also be tailored, with detailed cross-classifications possible on a wide range of topics. In designing and developing these surveys, some

additional challenges may arise. For example, some level of comparability may need to be maintained with surveys covering the same topics for the population as a whole, and with previous special surveys of the group.

Administrative records

Administrative records can provide valuable data when minority status is determined on the basis of migration background. They can also provide valuable information when indigenous status is recorded. For example, in cases where standard questions on indigenous status are included in relevant administrative systems (e.g. birth and death registrations, hospital records, school records, police records, etc.) and good coverage of the population of interest is achieved, important gender-relevant information can be produced on variety of topics relating to government programs and service provision. Such data can complement what is collected through censuses and surveys.

Engagement and enumeration strategies

Representatives of relevant minority groups should be consulted throughout the statistical production process to assure transparency, ensure questions will be correctly understood by the women and men in their group, and to encourage the group's full cooperation in providing data. Whatever collection method is used, respondents should be informed about the reason for gathering the data and the importance of accurate responses.

Some minority groups can be particularly difficult to enumerate in both censuses and surveys. These may include, for example, ethnic groups who have trouble reading or speaking the official language, indigenous people who live in remote areas, and homeless persons. Special enumeration strategies may be helpful in obtaining reliable data from the men and women in such groups.

Box 4.49 provides an example of a special enumeration strategy, based on Australia's 2006 Population Census.

Legal framework

In some countries data protection laws are often cited as prohibiting the collection of data on ethnicity, race and /or religion. Where the prohibition refers only to individually identifiable data, it may still be permissible to collect anonymous data under strict conditions. If this is the case, it may be possible for statistical offices to adjust their collection and processing procedures so that anonymous data are obtained in compliance with legal framework.

Political and cultural context

There can be various challenges in self-reporting of information on ethno-cultural status. Among these are the interpretation of the concepts involved and their political and cultural connotation. For example, it may be difficult to identify the actual meaning behind a respondents' declaration of a particular ethnic origin. It could be a statement of identity, a declaration of particular ancestry or an expression of affiliation with a particular group within the society.

Box 4.49: Indigenous Enumeration Strategy in Australia's 2006 Population Census

Targeted procedures were used in Australia's 2006 Population Census to ensure that the coverage of particular groups was as complete as possible. Separate strategies were developed for Indigenous people, Ethnic groups, and Homeless persons.

The Indigenous Enumeration Strategy consisted of special collection procedures and Census awareness activities to improve the coverage and accuracy of the Aboriginal and Torres Strait Islander population count. It identified and addressed cultural and other barriers to the effective enumeration of these people in both discrete communities and in households in rural and urban areas. A consultative committee covering a range of stakeholders was established in 2003 to guide the development of the strategy.

The special collection procedures included the use of Indigenous engagement managers who liaised with Indigenous communities to establish rapport; extensive consultation with Indigenous organizations and communities; a special recruitment effort to ensure that wherever possible Indigenous people were employed to help with the collection; a more flexible approach to enumeration, enabling the tailoring of strategies to suit community characteristics and specific situations; the use of specially designed forms and additional questions in nominated discrete communities to improve coverage and data quality; the use of interviewers rather than self-completion questionnaires in many Indigenous communities in remote areas; and independent observations of the Census enumeration in a number of remote areas.

The awareness activities were aimed at encouraging participation of Indigenous people in the Census. They included newspaper articles, presentations in Indigenous languages, radio and television interviews and information brochures.

Source: ABS 2006b, 2007a

These personal perceptions may change over time, often depending on whether or not the socio-political environment of the country is safe or favourable enough for individuals to identify their minority status.

While a positive environment towards minority groups can encourage good reporting, a negative environment can have the opposite effect. In particular, persons belonging to certain minority groups may be particularly vulnerable to discrimination on the grounds of ethnicity or religion. Because of this, individuals might be reluctant to identify as members of the group. An example is the Roma minority in countries of Central and Eastern Europe. Although official statistics on the number of Roma often exist, advocacy groups and others believe that these statistics heavily underestimate the real number. One of the main reasons could be that individuals fear discrimination if they report their true identity.

Data confidentiality

Obtaining reliable data on ethno-cultural background may be problematic if respondents have concerns about confidentiality. Legislation protecting the confidentiality of personal data may help in getting members of minorities to identify their status, but some may still lack the confidence to identify due to distrust towards government and/or fear of giving social visibility to the minority group. Special care may be required in data collection procedures and outputs relating to such groups in order to demonstrate to respondents that appropriate data protection and control measures are in place.

Coverage of selected migrant sub-groups

Special procedures may be needed in some countries to ensure particular types of migrants are not overlooked when conducting surveys. For example, where a country has significant numbers of foreign women doing domestic and caring work for households, their work might easily be overlooked in data capture processes. Information on the characteristics of different migrant sub-populations is important for understanding issues associated with their wellbeing as well as for analyzing the social and economic impacts of their presence on the wider community.

The forced migration of individuals as a result of 'people trafficking' can involve many countries: some may be the source of trafficked persons, some may be the destination for these persons or provide a transit route, and others may be involved from all of these perspectives. In view of the illegal nature of the activity, it is unlikely that any country will ever be able to collect comprehensive statistics about the group of people who have been subjected to trafficking. However, it might be possible to use administrative records - such as those held by welfare services, immigration services, and the criminal justice system - to produce some gender-relevant statistics on cases that come to light.

Data dissemination and analysis

In many countries there may be potential for greater use of available data to describe gender issues across and within minority groups. For example, in East European countries there is a long tradition of data collection on ethnicity in Population Censuses but dissemination of socio-economic data by sex and ethnicity status is still limited. Improving data dissemination and accessibility can often be critical to achieving greater data use. Better and more accessible information on the collection methods used and the reliability of results may also be important.

In presenting statistics on minority groups, age standardization may be important for comparing individuals in one minority group with those in another or in the general population. In cases where the age structures of the different populations are significantly different and the variables of interest are highly related to a person's age, comparisons of unadjusted data can produce misleading results.

4.16 Social exclusion

4.16.1 What it is

Social exclusion generally refers to a situation where a person does not participate in the normal relationships and activities available to the majority of people in the society in which the person lives. It reflects a lack of connectedness that is multi-dimensional in nature and shaped by the communities, social and physical environments in which they live. It can affect both the quality of life of individuals and the equity and cohesion of society as a whole.

Social exclusion can also be described as a process: the process of being progressively shut out from the social, economic, political and cultural systems which contribute to the integration of people into the community. This may involve the lack or denial of resources, rights, goods and services as well as an inability to participate in key activities.

Poverty, deprivation and social exclusion are distinct but overlapping concepts. Together, they cover what many people understand by the term 'social disadvantage', which involves restricted access to resources, lack of participation and blocked opportunities. In the case of poverty, the focus is often on the lack of resources required to achieve an acceptable standard of living, whereas social exclusion has broader and different dimensions. In particular, social exclusion extends the focus beyond an individual's lack of resources to also encompass an individual's lack of capacity to meet everyday needs, and the roles of institutional structures and community attitudes in creating the barriers that restrain participation. These barriers may involve discriminatory practices, language or cultural factors, or legislative or regulatory restrictions.

Social exclusion can take many forms. Broad dimensions that are often of interest include:

- economic resources (e.g. being poor in terms of both low income and deprivation, or having a low level of assets or low consumption possibilities);
- labour market participation (e.g. being unemployed for a long period, or living in a jobless household);
- services access (e.g. lack of adequate access to key services such as public transport, health care, financial services or basic services inside the home); and
- social relations (e.g. lack of someone who will offer support in key areas of personal life, no social networks, or disengagement from political and civic activity).

4.16.2 Why it is important

In many countries social exclusion is considered to be a major issue that affects the wellbeing of significant numbers of women, men and children. Some population groups can be particularly vulnerable and the negative effects can spill over into the wider community, rupturing social bonds and breaking down social cohesion. Gender differences and inequalities can be a fundamental feature of social exclusion.

Data are needed to understand the nature and extent of social exclusion, the risks and pathways associated with such disadvantage, and its effects on the individuals concerned, their families and the general community. To understand the impacts from a gender perspective, it is crucial that the data are disaggregated by gender as well as other demographic variables.

Box 4.50: European Union's social inclusion strategy and indicators

The EU's social inclusion strategy is aimed at making "a decisive impact on the eradication of poverty and social exclusion" by ensuring: that there is access for all to the resources, rights and services needed for participation in society, by preventing and addressing exclusion, and fighting all forms of discrimination leading to exclusion; that there is active social inclusion of all, by promoting participation in the labour market and by fighting poverty and exclusion; and that social inclusion policies are well-coordinated and involve all levels of government and relevant actors and that they are efficient and effective and mainstreamed into all relevant public policies.

Member countries are required to monitor progress against a number of commonly agreed social inclusion indicators. This includes analysis of the current situation concerning social exclusion, identification of key challenges, review of the effectiveness of existing policies and identification of key priorities for the future. In the context of the EU social inclusion process, poverty and social exclusion are relative concepts that encompass income, access to essential durables, education, health care, adequate housing and distance from the labour market.

As from June 2006, the indicators include 11 primary indicators, 3 secondary indicators and 11 context indicators. Most of the indicators have age and gender breakdowns. The primary indicators contain only the most important ones describing the various dimensions of poverty and social exclusion. They are:

- at-risk-of poverty rate (share of persons aged 0+ with an equivalized disposable income below 60% of the national equivalized median income)
- persistent at-risk-of poverty rate
- relative median poverty risk gap (difference between the median equivalized income of persons aged 0+ below the at-risk-of poverty threshold and the threshold itself, expressed as a percentage of the at-risk-of poverty threshold)
- long term unemployment rate
- population living in jobless households
- early school leavers not in education or training
- employment gap of immigrants
- material deprivation (to be developed)
- housing (homelessness, housing costs and decent housing) (to be developed)
- self-reported unmet need for medical care by income quintile (because of financial barriers, waiting times, or too far to travel)
- child well-being (to be developed).

Source: European Commission 2006b - *April 2008 Update*.

Such data are essential for developing appropriate policy responses, targeting programs to address barriers and capacity issues, and monitoring the success of these programs.

Measures aimed at removing the barriers to participation in society, strengthening capacity and encouraging social inclusion are core aspects of social policy in many countries. For example, the European Union (EU) has adopted a social inclusion framework that lies at the heart of EU social policy making and is relevant for all member countries as well as those seeking membership. It reflects a basic right in the European Social Charter: the 'right to protection against poverty and social exclusion'.

Box 4.50 outlines the aims of the EU social inclusion strategy and describes how it has driven the development of a set of social inclusion indicators to monitor progress in each member country. A gender breakdown is applied to the indicators wherever it is judged relevant and meaningful.

Box 4.51: Gender analysis of social inclusion indicators in European Union countries

The report, *The Social Situation in the European Union 2005-06*, underlined the importance of equal opportunities for securing adequate incomes for families and protecting them against poverty. Among the gender-relevant findings relating to social inclusion were:

- The at-risk-of poverty rate for women was 3 percentage points higher than that for men.
- Single parent families – typically single mothers - were much more at risk of poverty and social exclusion than the average, often reflecting the difficulty of reconciling full-time employment with family obligations. One third of them were exposed to poverty and social deprivation.
- Other groups with higher than average levels of poverty risk included women living alone, old people living alone, and couples with 3 or more children. For persons living in jobless households with children the risk was particularly acute.
- People most at risk of poverty – lone parents and couples with 3 or more children – could only afford low quality housing.
- Older people, single persons and lone parents were most likely to spend a high proportion of their disposable income (close to 60%) on essential items.
- Immigrant women faced particular challenges - their employment rate in 2005 was 15 percentage points lower than that of their EU national counterparts (the corresponding gap for men was smaller, 7.7 percentage points). The report concluded that these data showed the need for increased efforts to ensure social and labour market integration and better utilization of the employment potential of immigrant women.
- Female income from work was increasingly important for the living standards of the household. Analysis of child poverty across the EU indicated that child poverty was 3 to 4 times lower when the mother worked.
- Of 18-24 year olds, women (13%) were less likely than men (18%) to have not completed a qualification beyond lower secondary schooling and at the same time to be not in education or training. The at-risk-of poverty rate was much higher among these early school leavers.
- Long term unemployment was more prevalent among females than males (4.6% compared with 3.5%).
- People in jobless households were at least 3 times more likely than those in working households to be living below the poverty line. Of people aged 18-59, 11% of women and 9% of men lived in such households.

Source: European Commission 2007a

Box 4.52: Gender dimensions of homelessness in Australia

Homeless people are among the most marginalized people in Australia and their profile has been changing in recent years from predominantly older, lone men to include more women, youth and families. Factors ranging from increased family breakdown to changes in the labour market have been identified as influencing these changes. These findings resulted from an analytic study that used data from the 2001 Census of Population and Housing, modified with administrative and survey data, to estimate the number of homeless persons in 2001.

Other gender-specific findings included:

- Of the 99,900 homeless people in 2001, 58% were males and 42% females. In age groups above 34 years, men made up around two thirds of homeless people
- There were more males than females in every segment of the homeless population except those in supported accommodation where males made up 47%. Supported accommodation agencies include many refuges for women escaping domestic violence
- Although there were more males in the homeless population, women are now a substantial minority compared with 30-40 years ago
- Most notable was the predominance of males in boarding houses (72%). There were also more males than females sleeping rough (61%), and staying with friends or relatives (53%).

Source: ABS 2003

4.16.3 The value-added of statistics

To understand and address the gender-specific aspects of social exclusion, it is important to have reliable, sex-disaggregated statistics on its various dimensions. Gender differences are apparent in many of the commonly used indicators of social exclusion, with females facing greater risks of poorer outcomes in some areas and males in others. The magnitude of the gender gap varies according to the dimension of social exclusion that is being analyzed and trends over time may indicate a widening or narrowing gap.

A gender perspective is also vital for understanding the extent and form of social exclusion among particular disadvantaged groups within the population of many countries. For example, some disadvantaged groups are predominantly female, such as lone parents. The intersection of gender and age in risks of social exclusion is another area where the issues are complex and changing.

Data on these gender differences can assist policy-makers, program managers, service providers and researchers to identify the characteristics of those most in need and to put in place appropriate, gender-sensitive strategies and interventions for addressing the different forms of disadvantage that people are experiencing.

Gender-relevant information can also help to inform public debate on social exclusion and to assess progress towards meeting national objectives in this area.

For example, the gender breakdowns that are available for the EU social inclusion indicators have added important insights in monitoring progress towards the objective of preventing and alleviating poverty and social exclusion in EU member countries. Box 4.51 uses a report on the social situation in the EU to highlight the type of gender-relevant information that has helped to inform analysis and to evaluate policy measures in those countries.

Homelessness is one of the most extreme forms of social exclusion. In many countries it is a continuing public policy issue and often there are a range of programs to assist homeless people. These programs may target people with different needs, such as women and children escaping domestic violence, single men or women, young people, etc. In this context reliable information is needed on the social characteristics and geographical spread of homeless people, including their gender and age. Box 4.52 uses an example from Australia to show how data on gender can inform debate on this topic.

4.16.4 Implications for data collection

Types of measures

There are no universally agreed definitions of the overlapping concepts of social exclusion, poverty and deprivation, and the aspects that are emphasized can vary considerably between countries, reflecting the wide variation in social conditions in different countries and differing national priorities. To produce gender-relevant measures of social exclusion, a key challenge is to determine what types of measures are most needed in the particular circumstances of a country. In some cases the priority may be to describe the nature and extent of social exclusion as it currently exists and to identify the trends that are emerging. This may require measures of the multiple disadvantages experienced by certain categories of people, including the impact on their lives and on the wider community. In other cases the focus may be on the risks of certain individuals becoming socially excluded. This may require a range of indicators associated with particular dimensions of social exclusion or, conversely, social inclusion.

Whatever approach is chosen, measures of change over time and across population groups, with dissections by gender, are likely to be important for informing debate. There is also likely to be a need for contextual information on social inclusion, such as levels of participation in key activities by the population as a whole.

Data sources

Many different data sources can be useful in producing measures of social exclusion. While Population Censuses, household sample surveys and administrative records can all provide valuable gender-relevant information, the sources that are most important depend on the types of measures required. In some cases it may be necessary to use a combination of data sources to derive a comprehensive measure of a particular aspect of social exclusion, such as homelessness. Box 4.53 looks in more detail at the variety of data sources that can be useful in measuring homelessness, based on experiences in Europe.

Surveys of income, expenditure and/or wealth can be particularly valuable in providing measures that relate to the *economic resources* dimension of social exclusion. For example, they

can be used to identify households and individuals that have low income, low assets and low discretionary expenditure, and to examine their characteristics. They can also be used to produce measures of financial stress. Similarly, Labour Force Surveys can be valuable for examining the *labour market participation* dimension of social exclusion, such as long term unemployment or jobless households. Living conditions surveys which explore a range of social issues and the inter-relationships between them can be valuable in studying the *social relations* dimension of social exclusion, as well as the interactions between the different dimensions. For example, they can be useful in identifying people facing multiple disadvantage and in understanding their circumstances.

Longitudinal surveys, or longitudinal elements in cross-sectional surveys, can provide insights into the persistence of a particular situation, such as low income or joblessness, and the causal pathways and transitions involved. An example of a survey of this kind is the European Survey on Income and Living Conditions which was launched in EU member countries in 2004. The survey has both cross-sectional and longitudinal components, collects data on both income and living conditions, and is a key source for the EU's common indicators for social inclusion.

In some cases it may be necessary to conduct specially targeted surveys as those relating to the mainstream population may not adequately cover people who are not participating in society or are at high risk of dropping out (e.g. samples may be too small, or their designs may exclude certain living situations). Since social exclusion is often concerned with the things people miss out on doing, this can also present a challenge when identifying it because many sources tend to focus on identifying the things that people actually do.

In many countries, administrative records can provide information on some aspects of the *services access* dimension of social exclusion, such as the characteristics of people who use special support facilities to meet basic accommodation, health care, transport etc. needs. However, there can be limitations around the data from such sources for examining social exclusion issues, since many people with high risk of exclusion may not use such services. On the other hand, for some special groups shut off from society in institutions, such as those in prisons and correctional facilities, administrative data may be a particularly good source.

Role of frameworks and standards

For countries seeking reasonably comprehensive measures of social exclusion, it may be helpful to develop a framework within which the different dimensions can be systematically considered, the particular indicators for each dimension can be defined, and the data items needed to derive each indicator can be decided. A framework of this kind can also be a useful tool in presenting and analyzing the results.

In some cases, it may be possible to define indicators in a way that aligns with international or national standards and guidelines for producing data in a particular field, such as unemployment or income. In other cases, there may be no relevant standards and indicators may need to be developed from the ground up.

Box 4.53: Measuring homelessness in Europe

A report on *Measuring Homelessness in Europe*, published by the European Commission in 2005, identified methods and practices to develop an information base for measuring homelessness and housing deprivation in EU member countries.

It recognized the role and value of different sources in collecting data on different categories of homeless people. In particular:

- information on people living in emergency accommodation and in homeless accommodation can be obtained from client record systems held by service providers (e.g. overnight shelters, homeless hostels, women's refuges)
- administrative data can provide information on people living in institutions (e.g. health care institutions, penal institutions)
- survey sources can be used to obtain information on people living rough (e.g. on the streets or in public spaces without a shelter) and people living temporarily with family and friends due to lack of housing and
- census data can provide information on people living in non-conventional dwellings (e.g. mobile homes, temporary structures) due to lack of housing, and in some cases on people living temporarily with family and friends.

The report noted that these different sources can be used in combination and that they are essential parts of a strategy to measure homeless people. Among the methodological issues identified in the report were the need for standard core variables, the need for a comprehensive directory of service providers, and the use of unique identifiers to minimize double counting.

Source: European Commission 2007b

Some countries have found that considerable development work is needed to produce useful measures on some topics directly concerned with or closely related to social exclusion, such as financial exclusion, material deprivation, financial stress, housing stress, emotional wellbeing, etc.

Low economic resource indicators

There are no widely accepted measures of the extent to which people fall below minimum living standards and the numbers of people that fall below. Such people may be considered to be experiencing, or at risk of, poverty or social exclusion. However, it is possible to measure the economic situation of households that have lower levels of economic resources, such as income and wealth, and are therefore more likely to have standards of living below an acceptable minimum. It is also possible to identify the types of households that have lower levels of expenditure and therefore potentially also lower standards of living. Once such households have been identified, it is possible to analyze their characteristics, including the gender, age, and other characteristics of the individuals who belong to them.

In countries where household income is the major component of economic resources for most households, it is a key determinant of the economic situation of households. However, it is not the only economic resource available. Households that have higher levels of wealth can utilize these assets to support a higher standard of living. Some countries produce measures that relate to households having both low levels of income and low levels of wealth. For example, such measures - covering households with both income and wealth in the lowest three deciles - are produced in Australia. Similarly, it is possible to compare the expenditure of households in this low economic resources group with expenditure of all households in the population.

There are no uniform criteria for identifying low income households, or households with low economic resources or expenditure. Different thresholds are used in different countries and for different purposes. Many approaches involve median or mean measures that refer to a distribution that ranks all households in order of the size of their equivalized income, resources or expenditure. Household resources are chosen in preference to personal resources for developing these measures, in recognition of the sharing of resources that typically occurs between partners in a couple relationships, between parents and dependent children and, to a lesser degree, with other members of the household. But this assumption may not always be true: especially in some countries, women may not have access to family income and wealth (see section 4.8).

Even where there is no transfer of resources involved, members of a household are likely to benefit from the economies of scale that arise from the sharing of dwellings. However, larger households normally require a greater level of resources to maintain the same material standard of living as smaller households, and the needs of adults are normally greater than the needs of children. To assist analysis of the relative wellbeing of different households, estimates of household resources are often adjusted by equivalence factors to standardize them for household size and composition, while taking into account the economies of scale that arise from the sharing of dwellings. Although there is no standard equivalence scale, the modified OECD equivalence scale has wide acceptance in many countries.

Financial stress indicators

As there is no standard way to measure the total economic resources available to a household, or to measure the financial needs of a household, it can be useful to examine indicators of the economic situation of households which more directly identify people at risk of or actually falling below minimum acceptable living standards. For example, indicators identifying the different types of households experiencing high levels of financial stress may point to those most likely to have unacceptably low living standards. Box 4.54 provides an illustration of a summary indicator of this kind, using an example from Australia.

Box 4.54: Financial stress indicators in Australia

Several national household surveys conducted in Australia have included questions on financial stress. Respondents were asked about a number of potential symptoms of financial stress over the last 12 months, including whether they had various cash flow problems, such as being unable to pay certain bills on time; or whether they could not afford activities such as a night out once a fortnight, or a special meal once a week; or whether they had gone without food or heating because of a shortage of money.

Based on the information reported, a *high financial stress* indicator was developed. This summarized 15 individual financial stress indicators. Persons in households with high financial stress were defined as those people whose household reported an incidence of 5 or more out of the 15 individual indicators.

Source: ABS 2008d

Chapter 5
Improving the use of gender statistics

5.1 Communication of statistics

5.1.1 What it is

Communication of statistics incorporates the activities conducted to improve awareness, understanding and use of data.

To develop and then market any product or service, the first step is to determine who the users are and what their needs are. Once the product is ready to be shared, outreach and marketing activities are needed to let users know the product is available and explain why it is useful to them: in other words, how it meets their needs.

In the case of gender statistics, the same overall principles apply. Gender statistics have a wide audience that needs to be considered when developing marketing strategies.

5.1.2 Why it is important

Gender statistics are valuable only if they are used to assist in understanding of gender issues. Communication is needed to encourage their use and illustrate their value to different users of statistics.

National Statistical Offices are often characterized as being product oriented rather than client oriented. This view applies equally to gender statistics as to other statistical areas. For example, if a National Statistical Office released a publication on "Women and Men" and then stopped there, thinking their obligations to gender statistics were met, they would be limiting the value of this work and their response to this issue.

While most data producers would agree that the data they produce are not utilized as fully and effectively as they could be, the problem is in some ways even more acute in respect to gender. This is because gender-related data are sometimes not published at all, or at least not in an accessible and attractive form. Given the importance of understanding gender differences, special efforts are needed to ensure gender statistics are used.

Target groups

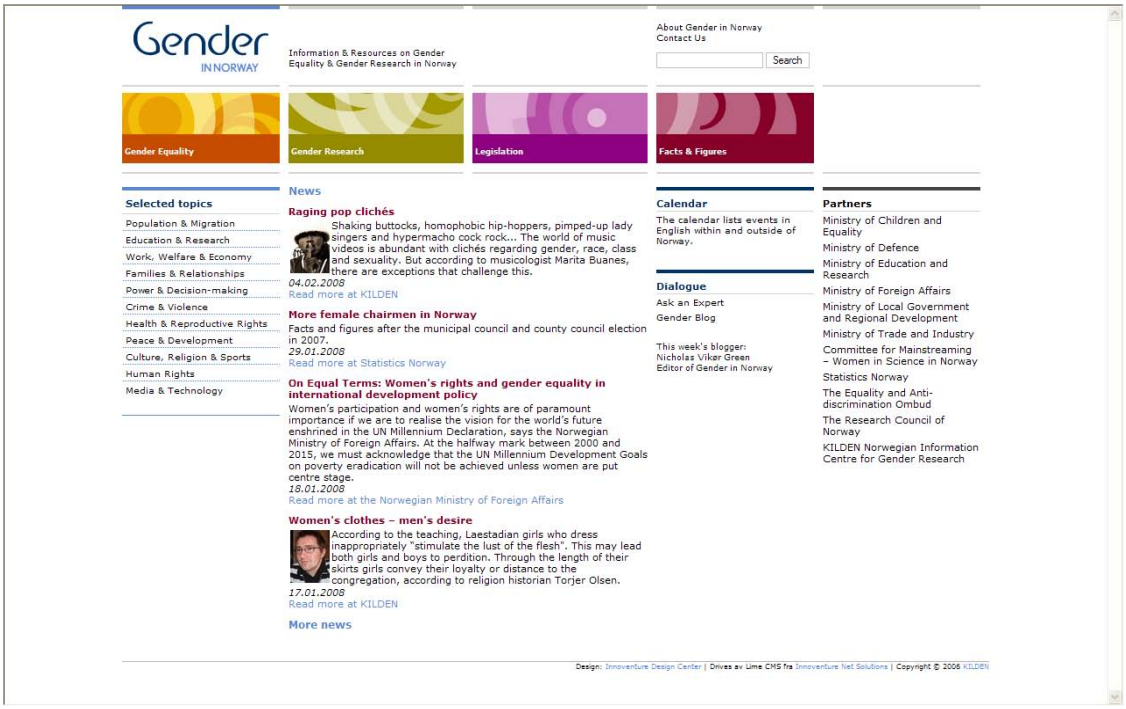
For the communication of gender statistics, it is important to identify the different target groups of the message. The following are the core target groups:

- Government bodies promoting equal opportunities
- Other government bodies (ministries of labour, social protection, education, etc.)
- Women's organizations, feminist organizations as separate Non-Governmental Organizations or within political parties, trade unions, parliaments, regional and municipal decision bodies
- Networks, faculties and libraries in universities and other parts of research environments focusing on questions of equality, equal opportunities, feminism and other gender-related issues
- Public libraries
- Women's magazines, publications and information centres
- Support centres fighting against harassment or violence against women, centres for young mothers and other gender-oriented social institutions
- Media
- International organizations.

Getting the message out

Each country has their own methods for alerting their customers of the availability of ongoing and new products. With the growing accessibility of the Internet, National Statistical Offices often use their websites to inform the public of data availability. Mainstreaming gender efforts should include ensuring there is a specific data link on the website that will take data users directly to tables and analysis on gender. This is particularly important as gender cuts across many subjects and can be easily overlooked as a heading in its own right.

Box 5.1: Gender Norway (www.gender.no)



An example of how to make gender issues and gender statistics more visible is provided by Norway, where a number of government organizations, including Statistics Norway, developed a Gender Website (see Box 5.1). This website includes information on the different gender aspects in Norway together with gender statistics, analysis and information on what is gender statistics and how it can be used.

Conferences and meetings represent an excellent opportunity to market gender statistics. Wherever possible, presentations and exhibits should alert potential users of the availability of gender statistics.

Sometimes novel ideas are used. For example, in the Czech Republic, a gender statistics brochure was produced and handed to all households who were selected in household surveys.

The media is an important channel for marketing and different strategies are needed to maximize its value. For example, timing the release of a gender publication can affect the extent to which it is used. Greater effect can be achieved if the publication is released to coincide with International Women's Day (8 March) or national events.

To increase the likelihood of gender statistics being used by the media, some journalists may appreciate National Statistical Office staff writing an article for them. Box 5.2 describes a guide for statistical organizations on communicating with the media published by UNECE. This approach has the added advantage of ensuring that statistics are correctly represented as there is not always a high degree of numeracy amongst journalists (see Box 5.7 *Making data Meaningful*).

When developing new users for gender statistics, it is important to consider those customers that already exist. Mailing or contact lists of those interested in gender-related statistics or even in particular topics are worth developing. If email addresses are known, it is possible to send out messages about publications, events, etc., with minimal cost. Opportunities should be used to enhance mailing lists over time by adding persons who, for example, attend gender training courses or order gender publications. The National Statistical Office can also use their website to invite interested users to have their names added to mailing lists.

Marketing plan

Most countries do not have a separate marketing plan for gender statistics, but incorporate the marketing of gender statistics within the overall marketing plan for the National Statistical Office. Gender programs often have to compete for scarce resources, so it is important that they have an overall action plan. The ideal is to embed a specific marketing plan within this overall plan.

The marketing plan should include the following elements:

- Identifying key partners and customers
- Developing the message
- Assigning responsibilities for communications
- Developing media contacts
- Analyzing feedback.

It is important to define key partners and customers first, because for different target groups, the message, the responsibility and the information content may differ significantly.

5.2 Dissemination

5.2.1 What it is

Dissemination of statistical data includes the methods of getting information to those who need it. In the case of gender statistics, dissemination can be via specific "Women and Men" publications, as well as by presenting sex disaggregated data wherever possible in all publications. Statistical data on gender issues can also be disseminated via databases on the Internet or in other electronic forms.

Data can be presented in several different forms, such as tables, charts or maps and can be accompanied by some textual description and analysis. In some cases, microdata, consisting of records at the individual level, are disseminated so that individual researchers can do their own analysis. In order to comply with confidentiality requirements, care must always be taken to ensure that individuals cannot be identified.

To facilitate correct interpretation of statistics, it can be sometimes useful to provide to users the contextual demographic information, such as number of women and men, their age structure, geographic breakdown, etc.

Another important consideration is the number of respondents behind an indicator. Where there may be an insufficient number of records for a variable – especially if one of the sexes is under-represented, the results may have statistical significance that is too low for being communicated.

In the dissemination of gender information, some countries have chosen to focus on women, while others consider women and men on an equal basis. For example, Canada and Germany title their gender publications as *Women in Canada* and *In the Spotlight – Women in Germany*. This does not mean that statistics presented are only about women, but it reflects a focus on issues pertinent to women. Other countries are neutral in providing gender statistics, where all data are presented for both women and men. This approach supports the view that the fundamental role of gender analysis is to measure the differences between women and men.

5.2.2 Why it is important

Communication and dissemination are closely related and intertwined subjects. While with communication, the focus is building relationships with users and encouraging use of gender statistics, dissemination focuses on the various forms of data provision. It is therefore a critically important step to ensure gender statistics are fully utilized.

Different forms for disseminating gender statistics

There are different forms for disseminating gender statistics, through specialized gender-related products and through the regular dissemination of statistics. This last approach is implemented by making sure that all data related to persons are sex-disaggregated, and that data on specific issues affecting one sex more than the other, or that relate to gender relations between women and men, are regularly disseminated. Often there are different products inside a national statistical system which can provide a wealth of gender statistics, but it may be difficult for users to easily navigate across them. A good example of how the accessibility of gender-relevant data can be improved is found in Canada, where the publication *Finding Data on Women: a Guide to major sources at Statistics Canada* was produced

Box 5.2: Communicating with the media

Communicating with the Media: a Guide for Statistical Organizations (UNECE 2004a) draws from the experience of statistical organizations in dealing with the media and communicating the complex issues often associated with statistics. The following extract from the introduction to the publication describes what it is about.

"The first thing to understand about journalists is that most are uncomfortable with numbers. Many journalists are unable to calculate a percentage increase. Many more would find it difficult to explain the difference between a percentage decline and a percentage point decline. Most also find data boring.

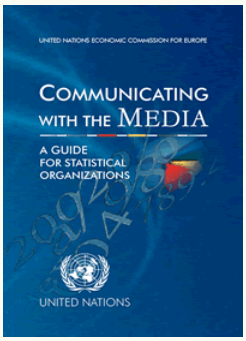
At the same time, however, journalists know that there are stories somewhere in the data. And they are becoming more aware that there are stories that cannot be told properly without resorting to statistics of one kind or another.

As a rule, it's fair to say that journalists and statisticians have little in common.

Yet, journalists and national statistical agencies are virtually inseparable. Why? Because the general public is an important audience for national statistical agencies, and the news media is a powerful tool for reaching this audience.

The challenge for a national statistical organization is to help journalists understand the data. Putting it simply, tell them a story. Tell them about the world they live in. Tell them how their numbers help the public understand what they see around them as they drive to work every morning and watch the news on television every night.

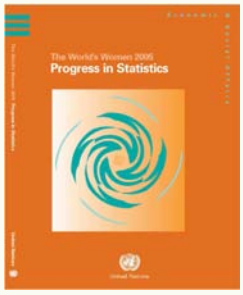
Done poorly, a news release may never reach the public, or its contents may be misinterpreted. Done well, however, a news release provides a unique opportunity for the organization to speak directly to its audience, to inform them on vital issues, and to demonstrate the value and importance of its programmes for society.



This material is intended as a practical guide to assist countries that are setting up a national statistical organization to communicate effectively with the media, and in turn, with the general public. It does not pretend to solve every problem that a national statistical organization will face. However, it offers the best advice from those statistical agencies that have been doing the job for years, to those who may be just starting out."

Source: *http://www.unece.org/stats/documents/media/guide*

Box 5.3: The World's Women 2005: Progress in Statistics



The United Nations has also provided a publication which uniquely focuses on national reporting of sex-disaggregated statistics *The World's Women 2005: Progress in Statistics* (UN 2006a). This publication provides an overview of the availability and quality of gender statistics around the world. It assesses progress made in the provision of national statistics, as opposed to internationally prepared estimates, relevant to gender concerns during the past 30 years. It also proposes a set of strategies to strengthen national capacity to collect and report statistics and also for improved mainstreaming of gender concerns.

Source: http://unstats.un.org/unsd/demographic/products/indwm/wwpub.htm

in 2007. This publication provides different users with a comprehensive overview of the scope and diversity of data available on Canadian women and men, as well as an indication of the ways in which these data can be used[59].

"Women and Men" publications

Sex-disaggregated data are often presented in "Women and Men" publications. The first country that issued such publication was Sweden in 1984 (see Box 6.10), and Statistics Sweden's assistance to other countries to do likewise has led to one of the most popular publications produced by National Statistical Offices.

The wide appeal of these publications is their small size, attractive appearance, mix of tables and graphics and level of relative simplicity. It is important that these publications contain information about where the reader can go to find more complicated or detailed statistics.

In 1997, the United Nations published a *Handbook for Producing National Statistical Reports on Women and Men* (UN, 1997) to support countries in their efforts to produce these national publications. It is based on lessons learned in preparing *The World's Women 1970-1990: Trends*

[59] http://dsp-psd.pwgsc.gc.ca/Collection/SW21-22-007E.pdf

and Statistics (UN, 1995b), which was a collaborative effort of United Nations agencies to present a factual view of progress made globally towards advancing the situation of women relative to men and which generated demand for gender statistics publications that could be widely disseminated to users of varied backgrounds.

Other official statistical publications

While gender-specific publications are important, it is equally important that sex-disaggregated statistics are shown in standard publications wherever possible. It is important to reinforce the idea that showing "gender statistics" is simply a part of normal "good practice" so that those who use the statistics in the standard publications will start reproducing the disaggregated data in their own work as a matter of course.

National Statistical Offices often use regular table reports to track trends over time on a given measure. Templates for these measures should be designed with a gender perspective wherever possible. Key measures of social and economic trends, such as employment rates, migration estimates or literacy rates are examples of where data should be presented by sex in an effort to mainstream gender statistics. Often National Statistical Offices include sex in the main tables, but not when other classifications are considered. Sex should be included in all data presented for women and men regardless of the number of other classifications considered.

Analytical articles/reports

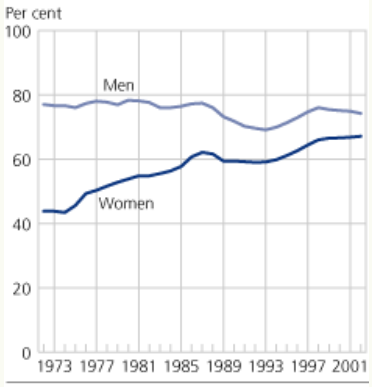
Wherever possible, information should go beyond sex-disaggregated data to provide analysis that sheds light on the reasons for gender differences and the factors that lie behind them. Differences that emerge when data are disseminated cross tabulated by sex often raise policy-related questions that require statistical expertise. Increasingly, statistical offices are developing expertise that enables them to help answer these questions by thoughtful development of in-depth analytical products (see Box 5.4 for an example from Norway).

Electronic provision of data

National Statistical Offices often include on their website much more detailed information than is shown in publications. These databases often have a gender dimension. In some cases offices have created a gender-specific database. Portugal provides an example of this (see Box 5.8).

Box 5.4: The gender-divided labour market – an example of gender analysis from Norway

Employed women and men aged 16-74. 1972-2002. Per cent



Source: Labour Force Survey.

The following is an extract of gender analysis by Statistics Norway (2005) published within their online Statistical Magazine, which contains articles on various statistical topics.

"In an international context, Norway is often regarded as a leader in gender equality. The employment level for women is approaching the same level as for men. However Norway still has an extremely gender -divided labour market. Statistics show systematic differences between men and women.

Increasing numbers of women in employment

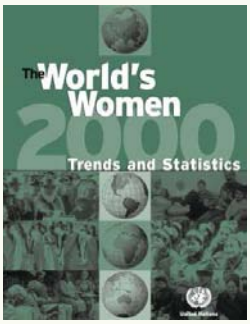
Despite employment levels of women increasing in all age groups, most of the levelling out between the sexes is due to the entry of mothers into the labour market. It seems that women with children under 3 now work to a greater extent than before. However, not surprisingly, women with one child work to a greater extent than women with two or more children. This demonstrates that it is also fully possible for women to combine family life with employment. Welfare schemes such as maternity leave, and the gradual transfer of care work from the private family arena to the public sector, have made this possible to a greater extent than before. Women stated that they now spend less time on housework than 30 years ago, whilst men said they spent longer.

...but women work less than men

A total of 4 out of 10 women have employment contracts that entail part-time working, whereas only 1 in 10 men have the same. Therefore, despite the substantial increase in the employment level of women, and the fact that it is approaching the male employment level, women still have shorter working hours than men."

Source: *Statistics Norway, 8 February 2005* http:/// *http://www.ssb.no/english/magazine/art-2005-02-08-01-en.html*

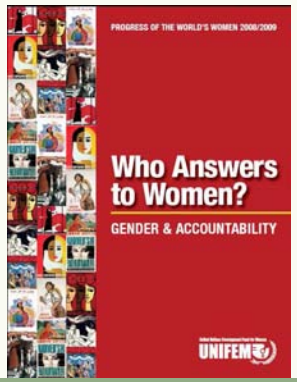
Box 5.5: The World's Women 2000 – Trends and Statistics



Examples of analytical publications produced at international level to present data and analysis on gender include *The World's Women 2000 - Trends and Statistics** (this is the third of a series of four analytical reports produced by the United Nations Statistics Division, the first having been issued in 1990), and *Progress of the World's Women 2008/9* (published by UNIFEM, with three previous editions in 2000, 2002 and 2005 – see Box 5.6). The UNECE *Making Data Meaningful* guides provide tips on how to bring data to life by explaining statistics through effective storylines and presentation of data (see Box 5.7).

Source*: http://www.un.org/Pubs/whatsnew/e00137.htm

Box 5.6: Progress of the World's Women 2008/2009 – Who answers to Women? Gender and Accountability

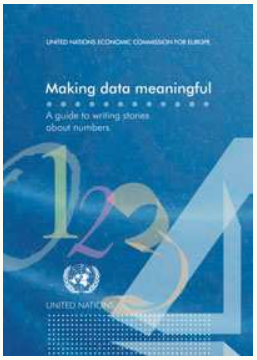


This edition of UNIFEM's *Progress of the World's Women* looks at the two-way interface between gender and accountability, whereby societies are not as accountable as they should be to women (resulting the non-achievement of gender equality commitments) and the dynamics of gender-responsiveness in accountability (resulting in the ability to participate in civil society on an equal footing with men).

This report looks at political and justice systems, public service provision, labour force constraints in the private sector and the framework for multi-lateral aid and security. It provides case studies from around the world, reports on gender differences in perceptions of corruption and examines the use of quotas as a tool to enhance the participation of women in politics.

Source: *http://www.unifem.org/progress/2008/*

Box 5.7: Making Data Meaningful



Making Data Meaningful Part 1: A guide to writing stories about numbers (2005) was prepared within the framework of the UNECE Work Session on Statistical Dissemination and Communication, under the programme of work of the Conference of European Statisticians.

The guide is intended as a practical tool to help managers, statisticians and media relations officers use text, tables, graphics and other information to bring statistics to life.

It contains suggestions, guidelines and examples of how to use effective writing techniques to make data meaningful.

The second publication in this series, *Making Data Meaningful Part 2: a style guide on the presentation of statistics* (2009), provides more detailed guidance on how to present data effectively in tables, charts and maps.

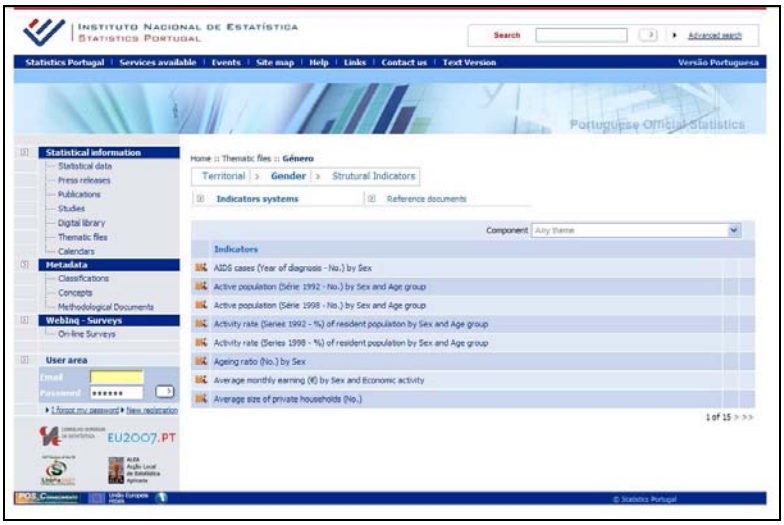
Source: *www.unece.org/stats/documents/writing*

Box 5.8: The gender database in Portugal

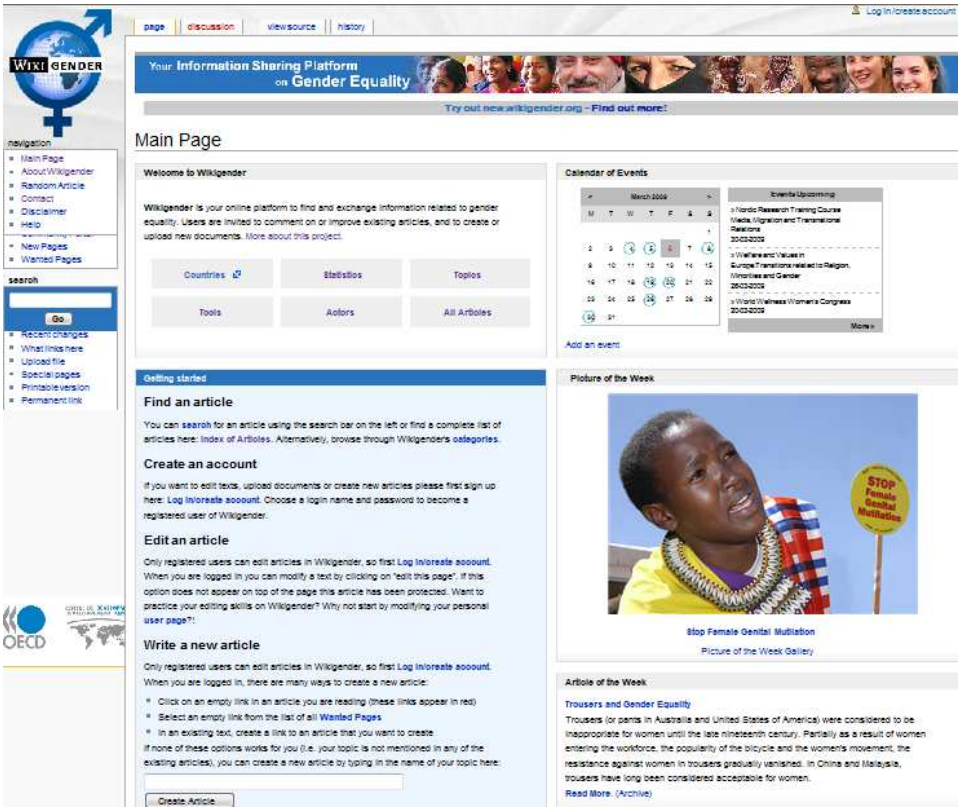
The National Statistical Office of Portugal developed a database on gender statistics which integrates information from different sources and provides gender-relevant data from official statistics. This database includes a set of indicators in eight domains: Population; Family; Education and Training; Activity, Employment and Unemployment; Conciliation of employment and family responsibilities; Health; Decision making; and Crime and Violence.

The majority of indicators are updated annually, and include data starting from 1970.

The database is freely accessible on the Internet. See: www.ine.pt



Box 5.9: www.wikigender.org



Other countries incorporate gender into the regular data dissemination on their websites and therefore do not have a specific gender page. For example, Statistics Sweden has taken the issue of gender one step further by showing social and demographic statistics only for men and women separately, without presenting totals. This includes fertility where data on male and female

fertility are presented. Those users who wish to look at percentages or ratios would need to calculate the totals for themselves. However, this is not true for the major part of the demographic statistics produced by Statistics Sweden. Furthermore, care should be given in the dissemination process not to confuse sex-disaggregated data with gender statistics. Although sex-disaggregated data are essential for the production of gender statistics, gender statistics should reflect gender issues, so a gender statistics webpage remains a useful tool.

New tools on the Internet are being used to assist with gender issues. For example, the OECD Development Centre released "Wikigender" which is an online resource on gender equality (see www.wikigender.org) in March 2008 (see Box 5.9). Wikigender provides an interactive platform to share and discuss information on gender equality.

It covers a broad range of issues, including theoretical concepts, empirical evidence and policy aspects of gender equality. Wikigender particularly focuses on statistics and measurement tools. It includes the OECD *Gender, Institutions, and Development Data Base* containing indicators on gender discrimination and the socio-economic status of women. Because a wiki is special software that allows users to easily build, edit and link web pages, they are frequently used to create collaborative websites whose content is continuously modified by the input of users.

Among other databases maintained by international organizations are *GenderStats* maintained by the World Bank, a database on *Women and men in decision-making* available on the website of the European Commission (http://ec.europa.eu/social/main.jsp?catId=764&langId=en), and the UNECE Gender Statistics Database, which will be discussed in the next section. Sex-disaggregated data on various themes are also available on Eurostat's database.

Statistically savvy users, including academics, often require more detailed data than is available in publications, such as microdata at the individual level. A limiting factor for National Statistical Offices is the important requirement that they must protect individual confidentiality. The provision of microdata to academic institutions and policy research groups is a growing area of statistics. If the microdata are too sensitive to release, then it is important that whatever is able to be released at least contains information by sex wherever possible.

5.3 UNECE Gender Statistics Database and website

5.3.1 UNECE Gender Statistics website

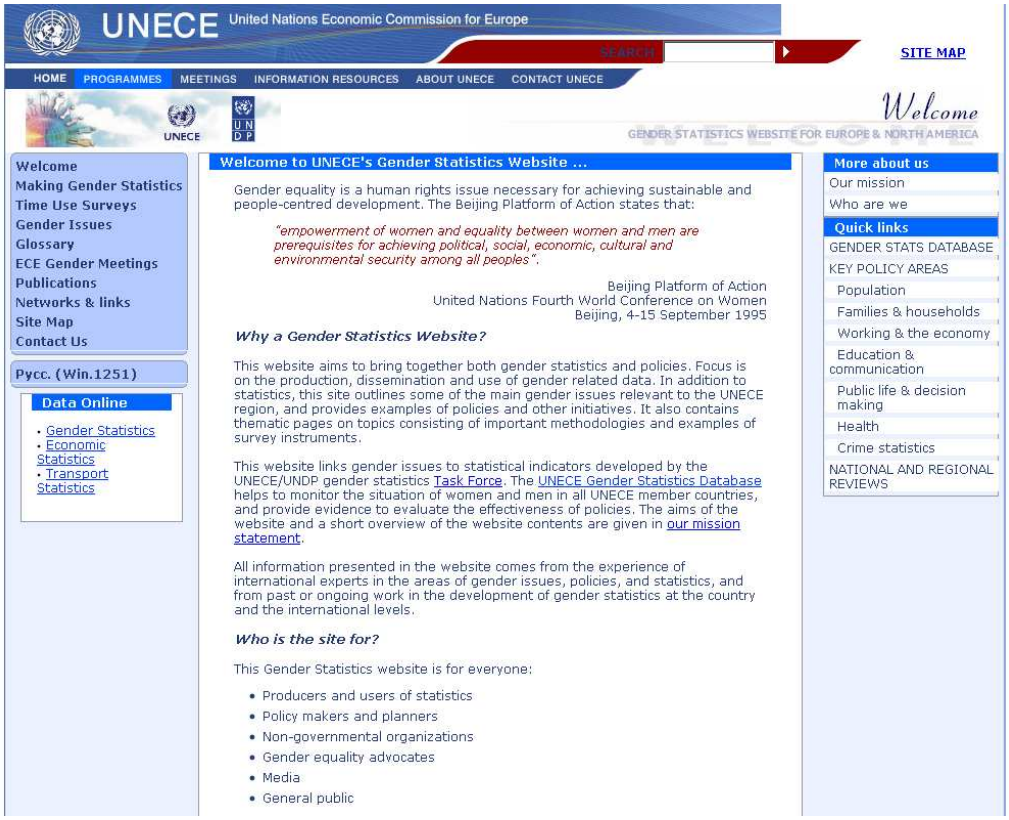
The United Nations Economic Commission for Europe, in collaboration with National Statistical Offices in the region, developed a website on gender statistics, which incorporates comprehensive information on how to make and use gender statistics. First released in 2002, the website is a product of the UNDP/ UNECE project on "Gender statistics website for monitoring change". The aim of this project was to improve the production, quality and use of gender statistics in countries across the UNECE region through strengthening national statistical capacity.

The website also includes the gender statistics database (see http://w3.unece.org/pxweb/Dialog/Default.asp).

The gender website has been created to provide general information about gender statistics in order to give a clearer picture of the subject. It covers the following topics:

- *What is gender statistics* – an introduction to the concept of gender statistics, and reasons why gender statistics are needed, including a short historical overview of gender statistics
- *Producing gender statistics* – the main steps needed to compile gender statistics
- *Presenting gender statistics* – appropriate visualization of gender statistics including practical information on what to consider when producing tables and graphs

Box 5.10: UNECE Gender Statistics Website (www.unece.org/stats/ gender)



- *Disseminating gender statistics* – discussion of various approaches used to ensure a wide dissemination of gender statistics
- *International standards and guidelines* – compilation of relevant methodological information in the field of gender statistics to enable international comparability.

The website also provides detailed information on Time Use Surveys (see section 3.4 for a general consideration of Time-Use surveys). The website presents relevant information on methods and practices of Time Use Surveys, at both national and international level, and is intended to be a valuable resource for countries planning such type of survey.

5.3.2 UNECE Gender Statistics Database

The UNECE's Gender Statistics Database is unique in terms of presenting sex-disaggregated data for a variety of subject areas for the countries in the region in both English and Russian. It is distinctive because the user can find all the data on gender issues in one place. The Gender Statistics Database is easy to use and navigate. It presents data for all countries of Europe, including Turkey, as well as for North America, and the Commonwealth of Independent States. The data can be viewed on screen and downloaded free of charge.

The Gender Statistics Database serves as a reference platform for improving gender statistics and contributing to inform policy debate and decision-making on gender issues. The data are relevant for anyone concerned with gender questions, such as public authorities, non-governmental organizations, scientists, students, women organizations, journalists, and international organizations.

Content of the Gender Statistics Database

The content of the Gender Statistics Database reflects the main indicators of the critical gender statistics areas, stipulated in the Beijing Conference Platform for Action (1995). The Gender Statistics Database is disseminated through a PC-Axis platform, organized in a tree structure according to the following domains:

- population
- fertility, families and households
- work and the economy
- education
- public life and decision-making
- health and mortality
- crime and violence
- science and information and communication technologies
- work-life balance

For each of these domains, the user can develop multiple tables extracting data on a variety of indicators (see Annex 1 for a list of the indicators). For each indicator or area of concern, data are presented on totals related to women and men, sex ratios and percentages of women and men in different sub-population groups. These different presentations are meant to help the users to fully understand gender disparities.

The database consists of data from most of the 56 UNECE countries (for information about member countries see www.unece.org/stats/profiles2009/). The data availability differs from country to country. At the end of 2007, the Netherlands was the country with the highest number of statistics available (about 70 percent), while Bosnia and Herzegovina was the one with the lowest number of statistics available (about 14 percent).

Nearly all data are sex disaggregated. In some cases, sex-disaggregated data are presented by age, education level, and household types. Data are available for the following years: 1980, 1990, 1995 (Beijing) and 2000-2009 inclusive. When a country was unable to provide the data for a specific year, they provided data for a year close to it, if possible.

Metadata are provided to interpret the data. The metadata consists of general information about the data, the source, the definitions, and specific country information regarding the data.

The Gender Statistics Database is maintained by the UNECE Statistical Division. Data are collected from international organizations and national statistical offices. A network of statisticians (Gender Statistics Focal Points) from national statistical offices facilitates the updating. It is largely thanks to their commitment and work that the Gender Statistics Database exists and is kept updated.

Proposals for improvement of the Gender Statistics Database

Efforts are ongoing to increase the data content of existing tables and to ensure that they are updated and maintained. There are also ongoing efforts to make it easier to update the data, as well as to improve the usability of the site. The questionnaire used to collect information has been redesigned and higher frequency of updating is now possible. Use is being made of available sources including international and national official publications and websites to reduce the burden of questionnaire completion.

Database use

Efforts have been made to improve awareness of the database by producing brochures (see Box 5.11) and highlighting information from the database wherever possible. References to the UNECE Gender Statistics Database on web pages of various organizations and universities also show its relevance among users of gender data.

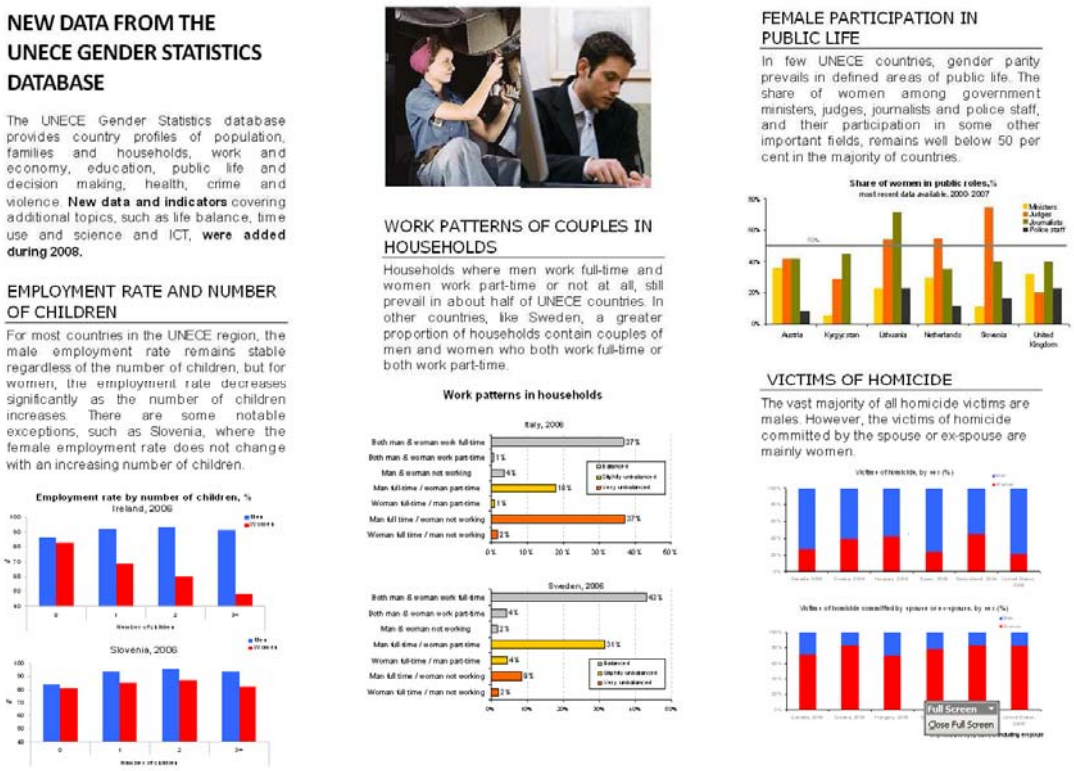
Following are two examples of how the UNECE Gender Statistics has been used by countries and international organizations.

The Federal Statistics Office of Switzerland published a paper *"Equal Opportunities for Women and Men: Switzerland in international comparison – Selected indicators on equal opportunities in the areas of education, work and politics"* in 2008. The UNECE Gender Statistics Database was used as the source of the report. Selected gender equality indicators shed light on the position of women in certain areas of life, and the situation in Switzerland was compared with that in other countries. Box 5.12 shows an extract of results from the publication. Furthermore, in 2009, the Swiss FSO published, in French and German, a report on occupational models in couple households and international comparisons of work and family life balance data drawn from the UNECE database[60].

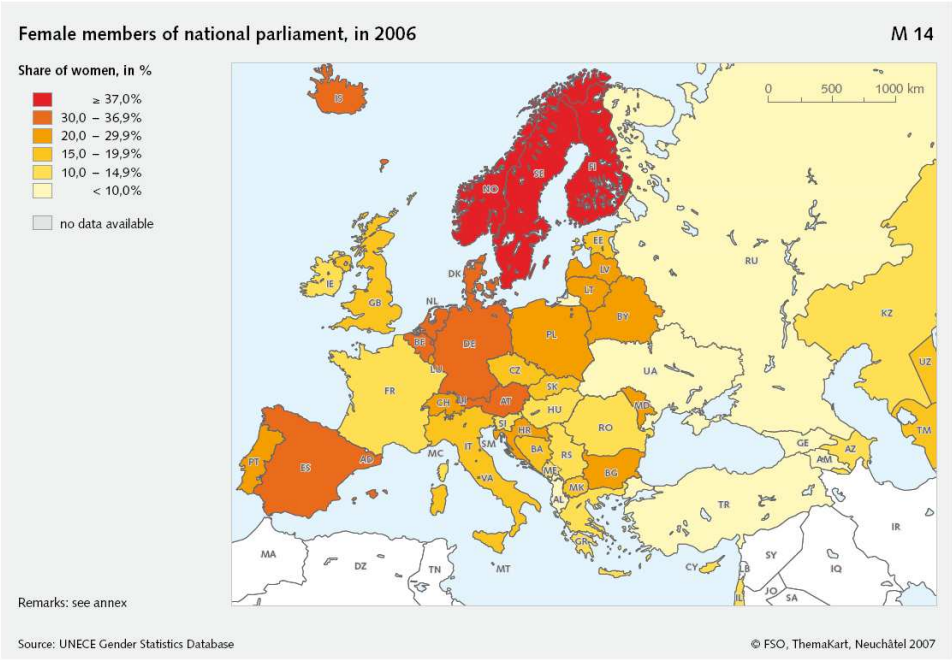
The United Nations Fund for Women (UNIFEM) also used the gender database as a substantial input for its publication *The Story behind the Numbers: Women and Employment in Central and Eastern Europe and the Western Commonwealth of Independent States* (UNIFEM 2006).

[60] For further information see the Press release at: http://www.bfs.admin.ch/bfs/portal/en/index/news/medienmitteilungen.Document.124476.pdf

Box 5.11: Examples from the UNECE Gender Statistics Database



Box 5.12: Equal opportunities for women and men: Switzerland in international comparison



Source: Equal Opportunities for Women and Men: Switzerland in International Comparison, January 2008, http://www.bfs.admin.ch/bfs/portal/en/index/infothek/publ.html?publicationID=3030

Chapter 6
Making it happen

6.1 Dynamics of getting started

Recognition is growing in most, but not yet all, societies that official statistics should describe, compare and analyze the lives of all members of society. This includes domains, such as education, health, employment and family life, as well as the interactions of the members by gender and their unique contributions and needs. Although in some countries this has been recognized for some time, in much of the world this is a relatively recent phenomenon. The development of gender statistics has followed recognition that gender is an important issue for social and economic development. As a result, gender statistics programs in the Nordic countries, for example, are mature, and in some other countries they are in a more embryonic stage. See Box 6.1 for an example of development of gender statistics in the Netherlands.

This section discusses some specific steps and actions to either start or strengthen an existing gender statistics program. Each individual statistical office should adapt these steps to its particular situation. No two offices or political systems are exactly alike and what works for one may not work for another. National Statistical Offices have either a centralized or decentralized structure (see Box 6.2) and this will determine the processes through which change can take place. For example, a decentralized system may make it harder to coordinate and construct alliances, but it may be easier to understand and meet customer needs. Thus, it is important to tailor the steps to adequately bring a gender perspective to all statistics produced by a National Statistical Office. These steps and actions can be categorized under the following:

- building alliances and meeting customer needs
- obtaining top management support
- developing funding
- legislation
- defining a gender statistics program
- organizational issues.

Training of statisticians cuts across these important elements in developing gender statistics. Statistical offices should not neglect the need for continuous skill development, to ensure adequate incorporation of gender aspects into production and dissemination of official statistics. Introduction of new standards and recommendations, such as the SNA 2008, should be considered in the development of training programmes. A case study on participatory training approaches used in the UNECE – World Bank Institute Gender Statistics Programme for countries in Eastern Europe and Central Asia is presented in Annex 2.

A case study on participatory training approaches used in the UNECE –World Bank Institute Gender Statistics Program for countries in Eastern Europe and Central Asia is presented in Annex 2.

6.2 Building alliances

Not everyone, even in a statistical office, will necessarily be convinced of the necessity for gender statistics. In order to develop a new program of gender statistics, or to improve an existing one, alliances should be built both inside and outside the national statistical system.

Within a statistical office

Within both centralized and decentralized offices there are natural constituencies that will often resist a gender statistics program. They may see gender statistics as either intruding on their prerogatives or as being unnecessary. Ensuring long-term viability of a gender statistics program requires first understanding the problems and needs of other domains (education, health, economic, etc.). For example, it requires understanding why different sampling frames, time frames, editing and imputation methods are used in different domains (e.g. in education or health surveys). Only then can the statistical office begin the joint process of integrating data across surveys and producing integrated gender statistics products. In addition to providing a

Box 6.1: Development of gender statistics in the Netherlands

The Netherlands has a long history of providing statistical data on the lives of women and men. Two governmental institutions mainly publish gender statistics in the Netherlands. The first is the national statistical institution, *Statistics Netherlands (CBS)*, which is the main producer of centralized formal statistics in the Netherlands. The other institution, the *Social and Cultural Planning Office (SCP)*, is a government agency which conducts research into the social aspects of all areas of government policy. The main fields studied are health, welfare, social security, the labour market and education, with a particular focus on the interfaces between them.

Examples of surveys initiated by the SCP are the five-yearly Time Use Survey and the (almost) annual Cultural Changes in the Netherlands Survey, both of which generate data on gender issues. Since its inception in 1973, the SCP has been producing generally rather broad and sophisticated studies on gender issues. Before the 1980s Statistics Netherlands did not produce any gender-specific statistical output, apart from statistics disaggregated by sex. In the mid 1980s, the policy department voiced its need for some supplementary and more elementary compilation of data on gender. Thus, Statistics Netherlands started a small yearly publication to meet this need.

Since 2000, Statistics Netherlands and the SCP merged their publications into a joint twice-yearly publication, called the *Emancipation Monitor*, which unites the objectives of both institutions including thematic and statistical elements. While gender is an important issue in the statistics produced in the Netherlands, the personnel capacity specifically available for gender statistics and analysis is limited. At SCP there are about two full-time persons dedicated to gender statistics and in Statistics Netherlands only about 0.3 full-time equivalents, mostly engaged in the coordination of the contribution by Statistics Netherlands to the common publication.

Box 6.2: Centralized and decentralized systems

Statistical systems in a country are either centralized or decentralized. In a *decentralized system*, there may be different statistical agencies located in different ministries devoted to different domains. In such a case, there are many different players responsible for the collection, production, analysis, and dissemination of data. If a coordinating body exists for the decentralized system, that office can organize and operate an inter-ministerial group to develop the reference points and standards necessary to integrate data across surveys. The deliberations of this inter-ministerial body should be regular and recurring. Moreover, the inter-ministerial body must be prepared to arbitrate differences and institute standards of data collection. The coordinating body must be able to implement decisions that are binding on the different statistical agencies. The likelihood of success of developing and implementing the necessary standards decreases significantly if this coordinating body does not exist, or if it does not have sufficient authority. In such a case the largest agency can attempt to develop a consensus. More likely, in the case of the absence of a coordinating function, it may be necessary for the Prime Minister's Office to become involved.

A *centralized system* has one entity that is responsible for the collection, production, analysis and dissemination of statistical data. Even in a centralized statistical office there are usually separate divisions devoted to each of the domains. In theory, at least, there is a single head of the agency that can make the necessary decisions. However, one should not underestimate the cultural and historical forces that exist in a statistical office and mitigate consensus and common standards (see section 6.2).

richer analysis of existing data, this process will also improve the data collection processes, editing, imputation and analysis in each of the domain areas. At the same time the statistical expertise in each of the traditional domain areas will be required in the collection, processing and dissemination of data from integrated surveys.

The advocates of gender statistics need to convince those working in different domains to cooperate with them and with each other on improving the processes from a gender statistics perspective. Training on gender statistics for statisticians working on different domains is essential to building successful alliances.

Another way to build alliances within the statistical office is to make certain that the data products resulting from the integration are not simply produced as gender statistics products. All the domain areas must receive internal and external credit for these products. This demonstration of how the process of integration enhances the work and prestige of each domain is vital to the success of the plan.

Outside the statistical office

Alliance building should not be restricted to the statistical office. Alliances need to be built with subject-matter experts in ministries, parliament, non-governmental offices, as well as international agencies and the private sector. A list of those who do or could share the goals of a gender statistics program should be developed in order to facilitate regular communication and alliance building. While the NSO may not be in a

position to readjust the scope of its agenda in order to meet all the expectations of the external actors, it is important that a common appreciation of the relevant issues is developed. It is also important that the promises that are made by statisticians are able to be delivered.

In addition to partners there should also be a list of customers or clients. While customers may share some of the goals of the program, their need is more pragmatic and immediate. For example, a legislative committee or a regional planning commission may support the gender statistics program because the data coming from the program will allow them to do their work more efficiently. The program should make achievable and realistic promises to its customers. Making overambitious promises to ensure approval or expansion of a program must be avoided.

Box 6.3 gives an example from Germany of a collaboration between producers/statisticians and users/government representatives to advance gender statistics.

6.3 Top management

Gender mainstreaming will not happen effectively if there is not firm commitment from top management within a National Statistical System (NSS). Such commitment will usually only be found if top management has a good basic understanding of gender issues, as well as an understanding of the role that gender statistics plays in ensuring policy-making that promotes gender equality effectively. Briefings and other information sessions for top decision makers are needed, alongside the more technical and detailed training which needs to be provided to those who actually produce and use the data.

Who has the power to change statistical products

Often in gender training, participants from middle and lower levels in an organization will state that they fully support changes to promote gender equality and improvement in the measurement of gender statistics, but that they do not have the necessary decision-making power to implement what they have learnt. This is partly true, but middle and lower level actors usually have far more power than they acknowledge or use.

High-level management determines the overall direction of the NSS and the agencies which constitute it. It does not, however, take many of the decisions that are needed to improve gender statistics in the NSS. The decision to introduce a new instrument, such as a time use or gender-based violence survey, may require top management's approval because of the substantial time and expense involved. However, the decision on changes to a questionnaire or administrative form does not generally require top management's approval. Further, even with the decision to introduce a new instrument, most of the discussions and planning will be done by middle-level management and those who work with them. Whether these proposals get through depends, in part, on the success of the communication strategy.

Accountability

National statistical systems should be accountable. Accountability in the area of gender statistics means that the National Statistical Office needs to be responsible for the provision of relevant statistical data from a gender perspective and to be responsive to the needs of the constituents, as well as to fulfil international mandates such as the Beijing Platform. Adequate staff should be available for all aspects of production, analysis, and dissemination of data.

Box 6.3: Producer-user collaboration to advance gender statistics in Germany

The Conference of Ministers on Equalization decided at the middle of 2007 to develop a system of gender-related indicators covering different topics, available primarily for the 16 federal states, the German "Länder", and if possible for administrative districts. They were to be based on existing surveys to avoid additional expenses. A task force was formed at the end of 2007 consisting of government representatives and statisticians.

Government representatives expressed their data needs and interests in relation to policy-making, while statisticians brought in their expertise, for example concerning feasibility and availability of data.

The result was a core set of nearly 30 indicators, which was accepted by the Conference of Ministers in October 2008. These can be subdivided into four categories:

- *participation*, which includes the fields of decision making as well as women and men in policy;
- *education*;
- *employment, income and child care*;
- *life style*, exemplified by life expectancy or elderly people living in single-person households.

Not all important issues could be included; for example, indicators on gender-based violence were not included.

6.4 Develop funding

The funding situation for almost all statistical offices is static. At best funding grows with inflation and more often than not it does not even keep pace with inflation. At the same time, there are growing pressures on statistical offices to provide more data and information more rapidly. Advocating a gender statistics program requires competing with both existing programs, such as national accounts, household surveys, and business surveys, and with potential new ones. There are several potential sources of funding for gender statistics programs: national government, international and non-governmental organizations, and market based.

Governmental funding usually has a greater chance of becoming a regular source of funding than other sources. To obtain new funding will require convincing the parliament or the relevant ministries of the necessity of this funding. One mechanism to accomplish this step is advocacy by a statistical council or board. International and non-governmental organizations could also influence the government to allocate funding for this purpose. Regardless of the advocate, the presentation for a new or revised gender statistics program should be realistic in the benefits of and deliverables from the program, and the cost should not be underestimated. By being realistic, the credibility of the statistical office and its advocates will remain intact.

International and non-governmental organizations themselves are another possible source of funding, but this type of funding is often not stable or long term, so may not be used for periodic collection and regular processing, analysis and dissemination of data. On the other hand it can be useful for other purposes, such as in the initial development of a program or to develop new analytical and dissemination systems. The UNECE/UNDP reports of 2004 on the Status of Official Statistics related to Gender Equality revealed that more than half the countries in Eastern Europe and the CIS had used external funding assistance for work in respect of gender statistics. Most of this funding came from bilateral and multilateral donors. The statistical office, however, should be able to maintain the new system from its own resources. Moreover, international and non-governmental organizations have objectives that may not be congruent with those of the statistical office. Therefore, care must be taken in using this type of funding to assure that distortions in the program of the statistical office do not occur.

A possible source of funding that has been used in some countries is the *revenue from the marketing and sale of statistical products*. In this case, the products from the gender statistics program can be recycled to fund the continuation of the program, if allowed by the laws and regulations of the country. But few if any agencies have been able to fund their programs based solely on revenue. One reason is the high cost of producing official statistics.

The statistical office should examine whether it has the necessary access to parliamentary leaders and others to arrange for additional funding needed to start or maintain a gender statistics program. If the answer is no, and in many statistical offices this is likely to be the case, then an external advocate must be found. This could be the head of a non-governmental organization or an influential member of the Prime Minister's office. The advocate must have access to the senior levels of the parliament, be credible and should believe in the need and benefits of the program for gender statistics.

6.5 Legislation

Some countries have shown their commitment to ensuring that a gender perspective is integrated into their national statistical system by including the need for this within the legal framework. For example, Ukraine promotes gender statistics in its gender equality law. South Africa refers to the need for gender relevant data in their statistical law. Other countries refer to the need for gender statistics in their national statistical plans. The level of detail covered in these provisions differs across countries. See Box 6.4 for an example from Spain.

Specific laws can also be developed for gender statistics. An example is a draft law considered in 2007 by the Italian parliament. This draft law aims to make gender disparities visible and to ensure equal readability of data relative to both sexes (See Box 6.5). It contains detailed requirements for gender statistics in different areas as well as the general requirement for all official statistics to be sex-disaggregated. It details some sources which need to produce sex-disaggregated data such as Population Census, business registers, agriculture, industry and services censuses. It also outlines the frequency and the domains where

sex-disaggregated data are needed, including areas where a gender perspective is more relevant, such as violence, unpaid work, health status and behaviour. The law also specifies the establishment of a Consultative Committee for gender statistics.

Another example of incorporating gender into legislation is the Statistics Act of South Africa, which includes the principle that official statistics must protect the confidentiality of the identity of, and the information provided by, respondents and be "sensitive to distribution by gender, disability, region and similar socioeconomic features" (See Box 6.6).

In the European context, there has been legislation on gender equality ever since the creation of the European Community (EC) in 1957. The EC Treaty includes legislation on gender mainstreaming (Articles 2 and 3), equality between women and men in matters of employment and occupation (Article 141), and sex discrimination within and outside the work place (Article 13). Currently, there are 13 Directives on gender equality in the areas of employment, social security and goods and services covered by EU-level legislation (European Parliament, 1997). These Articles and Directives layout the legislative basis for programs and policies leading to more equal involvement of women and men in all parts of society in EU countries.

Box 6.4: The "Equality law" in Spain and its impact on official statistics

In March 2007, a new Organic Law for the effective equality of women and men was approved by the Spanish parliament (3/2007). This law contains an important novelty as regards official statistics: article 20 ("Adaptation of statistics and reports"). The article states that in order to make gender mainstreaming more effective in the daily activities of all public services, all their statistics and reports must:

- include in a systematic way the variable sex
- include new indicators that allow a better understanding of values, roles, conditions and needs of men and women
- introduce indicators that can help monitor other variables that may affect discrimination
- increase sample sizes to guarantee that all variables can be analyzed by sex
- exploit available data to get more information on situations, conditions, aspirations and needs of women and men
- adapt statistical definitions to gender mainstreaming.

As a consequence of the entry in force of this new law, the statistical Office, INE, has been asked to write an annual report on developments and challenges towards its fulfilment.

In addition, the main tool for statistical planning in Spain is the National Statistical Plan, formally adopted by the government every four years. Among the five leading priorities of Plan 2009-2012, one of them is "to adapt official statistics to gender mainstreaming".

Box 6.5: Italian draft law on gender

In Italy, a draft law aims to make gender disparities visible and to ensure equal readability of data relative to both sexes. The provisions of the draft law provide precise indications and directives to producers of statistics as well as identify the areas of interest, the surveys and their periodicity needed in order to produce relevant sex-disaggregated data.

The text of the draft law states:

- Population census data shall always be sex-disaggregated, including data on households and institutionalized persons, and data on different household typologies shall be provided
- Agriculture, industry, and services censuses will provide sex-disaggregated data on individuals, by occupational status
- Sex-disaggregated data shall be produced yearly on: household typologies, fertility, mortality by cause, morbidity, education and training, employment and unemployment, poverty, social and political participation, and use of public services
- Sex-disaggregated data shall be periodically produced on: health status, disability, citizen's security, violence and abuse, time-use, informal social networks and caregivers, social mobility, and quality of life
- Business registers kept by the Chamber of Commerce shall be organized in such a way that all information on individuals will be sex-specific
- The National Statistical Institute shall provide estimates of unpaid work by sex.

Box 6.6: Statistics Act of South Africa

Clause 3(2) of the Statistics Act of South Africa (Act 6 of 1999) states the statistical principles of official statistics as follows:

Official statistics must protect the confidentiality of the identity of,

a) Relevant, accurate, reliable and timely;
b) Objective and comprehensive;
c) Compiled, reported and documented in a scientific and
e) Accessible;
f) In accordance with appropriate national and international standards and classifications; and
g) Sensitive to distribution by gender, disability, region and similar socio-

and the information provided by, respondents and be:	transparent manner; d) Disseminated impartially;	economic features.

As these are obligatory legislatures for EU Member States, a unit exists tasked with monitoring the implementation of the legislation in all member states. Additionally, this unit is responsible for developing legislation to cover emerging issues relevant to gender equality.

6.6 Defining a gender statistics program

In developing a gender statistics program, it is important to be clear as to the nature and extent of the program. A leading cause of failure to build alliances, find funding and meet customer needs derives not only from disagreements about gender statistics but from fundamental misunderstandings among the parties about what is intended by a gender statistics program. Unlike the System of National Accounts, which has been adopted by the United Nations Statistical Commission, there is no agreed upon international definition as to what gender statistics means. It is therefore imperative that the statistical office (or other sponsor of the program) is clear about what it intends by a gender statistics program. One way to do this is to have continuous dialogue between all producers and users of the statistics, which will also ensure that all needs are being met (See Box 6.7 on Finland's experience).

In defining what gender statistics means to the country, there is a basic level at which statistics, such as wages and life expectancy, are disaggregated by male and female. While such classifications are necessary, mere classification is not sufficient. At an intermediate level, one could build on simple disaggregation to also consider the use of surveys and administrative data – such as Time Use Surveys – that illuminate the lives of males and females in society.

At a more advanced level one could include the development of "new statistics". For example, the production boundary of the System of National Accounts does not include the outputs of domestic work such as cooking, cleaning and care of one's own children. The System of National Accounts definition of the production is not likely to change. But, it is possible for countries to develop their own satellite accounts to understand the dynamics and importance of domestic production (see section 4.3 on unpaid work). Ultimately, how each country defines their gender statistics program will determine the type of detailed analysis they can carry out. However, it is important to include other key players in these decisions, as discussed above (section 6.2).

In sum, some steps that should be included in developing a gender statistics program are:

- Develop and maintain dialogue between users and producers of gender statistics to ensure users needs are met
- Expand the use of existing sources by including the collection of gender-relevant information
- Develop new data collections encompassing relevant areas from a gender perspective
- Improve existing methodology and definitions to make them more relevant from a gender perspective
- Bring together data from different existing sources to develop a gender portrait of a country
- Develop a marketing plan

6.7 Organization of the gender statistics program

There are different ways to integrate gender statistics into the national statistical system. As seen in the organigrammes in Box 6.8 and Box 6.9, the positioning of the gender statistics unit within the organization has an impact on the reporting lines and therefore on the influence the unit can realistically expect to have in the overall structure.

Traditionally, gender statistics is often inside a small and confined part of the system. In many statistical systems, gender statistics is included as a sub-unit of another division, typically the social and demographic area. By confining gender statistics to this one area, it is likely that gender statistics will be viewed by the rest of the system as only a social and demographic issue. Bringing gender perspective to all departments, as demonstrated in the organization chart in Box 6.8, will allow a broader mandate for the gender perspective and gender mainstreaming (UNDP 2005). Creating an overarching gender statistics office where the gender statisticians and staff report to the Chief Statistician of the statistical system can be another option of integrating gender perspective in the national statistical system as shown in the Box 6.9.

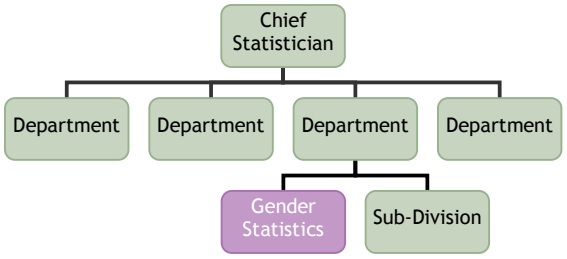
Box 6.7: Expert group on gender equality statistics – the Finnish example

Statistics Finland has set up an expert group to develop the way in which gender equality is depicted in statistics, to facilitate the use of Statistics Finland's data, and to strengthen collaboration between the producers and users of data. The main objective of the group is to exchange information.

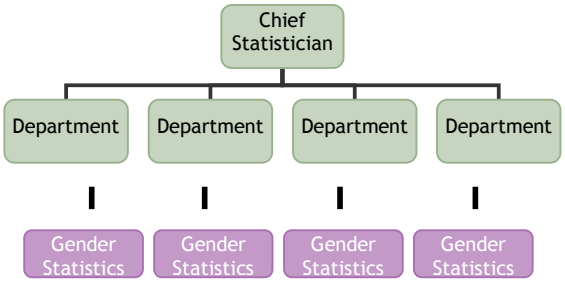
The expert group includes members from Statistics Finland, various ministries, research institutions, women's associations, trade organizations and employers' organizations. The group meets twice a year. In the meetings, it reviews the current situation of gender equality statistics and exchanges the latest information from various administrative branches. Another target is to point out the importance of taking the gender perspective into account in publications and Internet pages in different statistical areas. Each meeting also includes a presentation on some specific theme and a general discussion based on it.

Box 6.8: National Statistical Office structure (1)

From this structure

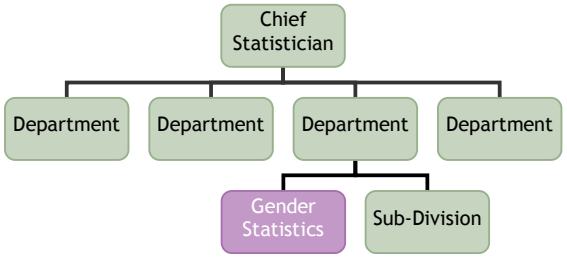


to this structure

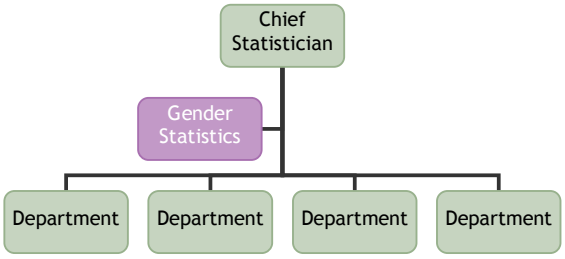


Box 6.9: National Statistical Office structure (2)

From this structure



to this structure



Appointing a key person as Gender Statistics Focal Point (GSFP) or creating a gender statistics unit within the National Statistical Office can be a good way to start a new gender statistics program in countries where no other gender focus exists in the national statistical system. In this case, the GSFP or gender statistics unit will play an active initiating role for the overall gender program. As the gender perspective is integrated into the system, the role of the GSFP or the gender statistics unit can change from initiating activities to overseeing work.

Most countries in the UNECE Region have a GSFP who should be responsible to ensure the gender perspective is taken into consideration in all steps in the production, analysis, and dissemination of all statistics by the National Statistical Office. The expertise and experiences of the GSFP should be available for all departments within the NSS.

In the national statistical offices, GSFPs are also mostly located in the social and demographic area. According to an assessment carried out by UNECE and UNDP in 2004 (UNECE & UNDP

2004), less than a third of GSFPs in the East European and CIS Countries interact on a regular basis with other statistical departments outside the social and demographic area (see Box 6.10). The lack of interaction indicates that, in many countries, the gender statistics program may be limited to cover only social and demographic statistics.

Another way to integrate gender statistics into the NSS is to have a dedicated Gender Statistics Unit, as is the case in Sweden (See Box 6.11). A small number of countries have established gender statistics units, but these again tend to be located in the social and demographic area with little influence in other areas, such as economic statistics.

Yet another way of organizing the gender statistics program is to establish a specific gender committee inside the statistical office or the statistical system. For example, Russia has constituted a committee of key players. The advantage of committees is that all areas of statistics can be covered and statisticians in all areas of statistics have full ownership of the programme. The disadvantage is that there is a danger that no responsibility will be taken. This can be overcome with clear terms of reference endorsed by top management. Regular reporting to top management is an essential requirement for success.

Box 6.10: The organization of gender-related statistics in the UNECE region: an assessment carried out between 2003 and 2004

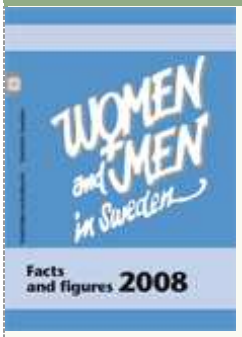
Between 2003 and 2004 UNECE and UNDP undertook a range of activities aimed at evaluating the quality and availability of gender statistics in the different parts of Europe and North America. The assessment included a questionnaire sent to NSOs on the nature of their gender statistics programs. The two reports produced as a result of this exercise detail, among other things, the situation in respect of how gender statistics is organized within national statistical organizations.

The report on Eastern Europe and the CIS countries found that only three of the 27 countries had a Gender Statistics Unit. Further, less than a third of the Gender Focal Points interacted on a regular basis with other statistical departments outside the social and demographic field where most of the Focal Points are located. Twelve out of 27 countries did not have any regulation or law governing the production of gender statistics. Where such laws existed, they were often unspecific. In terms of outputs and programs, three countries had never produced gender-specific publications and did not have any specific program on gender statistics.

Of the 22 countries covered in the report on Western Europe and North America, only two had a permanent gender unit. As with their Eastern colleagues, most of the Gender Focal Points were located in the units dealing with social and demographic statistics and their interaction with other departments was weak. Only six of the countries included gender in their statistical regulations (4 in a law, 4 in regulations, and 3 in action plans) while 10 mentioned statistics in gender-equality regulations. Three countries had not produced any gender-related publications over the preceding five years.

Source: (UNECE & UNDP 2004) *and* (UNECE 2004b).

Box 6.11: The Gender Statistics Unit in Statistics Sweden: an example of a success story



In the early 1980s a gender statistics unit was created in Statistics Sweden to monitor and compile statistics illustrating gender equality in Sweden. Some statistics were easily found, but many issues could not be addressed because of the lack of statistics. In order to make progress in this area, an in-depth discussion of the gender equality problem was conducted within the unit. It focused above all on how adequate statistics on women and men in Sweden could be produced. This work gave birth to the idea of a booklet on gender statistics.

Through collaborative efforts, *Women and Men in Sweden* was launched in 1984. It has been a major success, and continues to be published every second year. The initiative in Sweden and the booklet have been taken as an example to follow in many countries that want to set up similar gender equality projects. The Swedish international development cooperation agency, SIDA, has supported the development and production of many gender statistics booklets in developing countries.

In the course of assisting with the production of these booklets, the need for a handbook became salient. As a result, in 1996, Statistics Sweden published *Engendering Statistics, A Tool for Change*. It has been a key tool in the development of gender statistics and has been translated into several languages.

Regardless of the location, Gender Statistics Focal Points or staff of gender statistics units should have technical skills rather than simply administrative ones. It is unrealistic to expect a single person or a small unit to have all the necessary knowledge and skills about gender issues. Therefore, organizational support and cooperation is required from the whole national statistical office to ensure that gender statistics are adequately produced. In order for the GSFP to be effective in all areas of statistics, he or she needs to report to a senior manager of the organization. The GSFP needs to be at a sufficiently high level in the organization to have decision-making powers and to be taken seriously by other decision makers as well as technicians.

The person also needs to participate in senior management meetings to become aware at an early stage of all planned developments and ensure that gender gets thought about from the start. The terms of reference of the GSFP or gender unit needs to be clearly understood and promulgated throughout the organization. A viable gender statistics program will integrate data and provide information across domains.

In a decentralized system where there are multiple agencies responsible for generating statistics, the development of a gender statistics programme could be more complex. The existence of a coordinating body for the decentralized system is important as it can organize and operate an inter-ministerial group to run a gender statistics programme.

Abbreviations

ABS	Australian Bureau of Statistics
AIHW	Australian Institute of Health and Welfare
BLS	U.S. Bureau of Labour Statistics
CES	Conference of European Statisticians
CoR	Committee of the Regions
CSO	Central Statistics Office (Ireland)
DAW	United Nations Division for the Advancement of Women
DOSME	Demography of Small and Medium-sized Enterprises
EC	European Commission
EECCA	Eastern Europe, Caucasus and Central Asia
EESC	European Economic and Social Committee
EFILWC	European Foundation for the Improvement of Living and Working Conditions
EFTA	European Free Trade Association
EP	European Parliament
EU	European Union
FAO	Food and Agriculture Organization of the United Nations
ILO	International Labour Organization
IOM	International Organisation for Migration
ISTAT	Italian National Statistical Institute
ITPS	Institutet för Tilväxtpolitisker Studier
IUSSP	International Union for the Scientific Study of Population
NGO	Non-Governmental Organization
NSO	National Statistics Organization/Office
OECD	Organization for Economic Cooperation and Development
ONS	Office for National Statistics, UK
OPOCE	Office for Official Publications of the European Union
SCB	Statistics Sweden
SEE	South East European
SNZ	Statistics New Zealand
SPRC	Australian Social Policy Research Centre
StatCan	Statistics Canada
UIS	UNESCO Institute for Statistics
UN	United Nations
UNCTAD	United Nations Conference on Trade and Development
UNDP	United Nations Development Programme
UNECE	United Nations Economic Commission for Europe
UNESCAP	United Nations Economic and Social Committee for Asia and the Pacific
UNESCO	United Nations Educational Scientific and Cultural Organization
UNFPA	United Nations Population Fund
UNHCR	United Nations High Commissioner for Refugees
UNICEF	United Nations Children's Fund
UNIFEM	United Nations Development Fund for Women
UNODC	United Nations Office on Drugs and Crime
UNSD	United Nations Statistical Division
WHO	World Health Organization
WHOSIS	World Health Organization Statistical Information System

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Annex 1
UNECE Gender Statistics Database: List of indicators

Gender Country Profiles

Gender and demographic overview by Sex, Indicator, Country and Year.

Population

Population, 5-year age groups, by Age, Sex, Country and Year.

Sex ratio for population aged 80 and over by Country and Year.

Population, 5-year age groups, by Marital Status, Age, Sex, Country and Year.

Population 18 and plus, selected age groups, by Marital status, Age, Sex, Measurement, Country and Year.

Fertility, Families & Households

Total Live Births by sex, Measurement, Country and Year.

Adolescent Fertility by Measurement, Country and Year.

Total Fertility Rate by Country and Year.

Mean Age of Women at Birth of First Child by Country and Year.

First marriages by Age, Sex, Country and Year.

Mean Age at First Marriage by Sex, Country and Year.

Legal abortions by Measurement, Country and Year.

One parent families and children by Sex of parent, Measurement, Country and Year.

Private households by Household type, Measurement, Country and Year.

One-person Households by Age, Sex, Country and Year.

Work & the Economy

Labour Force by Age, Sex, Measurement, Country and Year.

Employment by Public and Private Sector,, Sex, Measurement, Country and Year.

Employment by Occupation, Sex, Measurement, Country and Year.

Employment by Activity, Occupation, Sex, Country and Year.

Employment by Level of Education, Occupation, Sex, Country and Year.

Employment by Status in Employment, Sex, Measurement, Country and Year.

Employment by Full-Time and Part-Time Status, Measurement,, Sex, Country and Year.

* Employment by Age of Youngest Child, Sex, Country and Year.

* Employment Rate by Number of Children under 16, Sex, Country and Year.

* Employment Rate by Age, Marital Status, Sex, Country and Year.

Unemployment by Age, Sex, Measurement, Country and Year.

Youth unemployment by Sex, Measurement, Country and Year.

Long-Term unemployment by Sex, Measurement, Country and Year.

Economically Inactive Population by Age, Reason for Inactivity, Sex, Country and Year.

Gender Pay Gap by Indicator, Country and Year.

** These tables are also be included under the section 'Work-life balance'*

Education

Upper and post secondary pupils by Sex, Measurement, Country and Year.

Enrolment ratio at secondary level by Sex, Measurement, Country and Year.

Educational attainment by Level of Education, Age, Sex, Measurement, Country and Year.

Graduates by Type of Programme, Sex, Measurement, Country and Year.

Teachers by Level of Education, Sex, Measurement, Country and Year.

Percentage of Population in Life-long Learning by Sex, Country and Year.

Public Life & Decision Making

Members of national parliament by Sex, Measurement, Country and Year.

Ministers of Core Ministries by, Sex, Measurement, Country and Year.

Government Ministers by, Sex, Measurement, Country and Year.

Senior Level Civil servants by Sex, Measurement, Country and Year.

Judges by Sex, Measurement, Country and Year.

Central bank board members by Sex, Measurement, Country and Year.

Journalists by Sex, Measurement, Country and Year.

Heads of universities by Sex, Measurement, Country and Year.

Ambassadors by Sex, Measurement, Country and Year.

Members of constitutional court by Sex, Measurement, Country and Year.

Police staff by Sex, Measurement, Country and Year.

Health and Mortality

Life Expectancy by Age, Sex, Country and Year.

Infant Mortality Rate by Sex, Country and Year.

Smokers, as a Percentage of Population, by Age, Sex, Country and Year.

Population by Level of Body Mass Index by Age, Sex, Weight, Country and Year.

Death Rate by Causes of Death, Sex, Country and Year.

Crime & Violence

Victims of crime by Sex, Type of Crime, Measurement, Country and Year.

Convicted Persons by Age Category, Sex, Measurement, Country and Year.

Convictions by Type of Conviction, Sex, Country and Year.

Victims of Homicide by Relationship of Perpetrator to Victim, Sex, Country and Year.

Prisoners by Citizenship, Measurement, Sex, Country and Year.

Science and ICT

Percentage of Population Using Computer by Age, Sex, Country and Year.

Percentage of Population Using Internet by Age, Sex, Variable, Country and Year.

Researchers by Sector of Research, Sex, Country and Year.

Work-life balance

Couples by Working Pattern, Age of Youngest Child, Country and Year.

Employment by Age of Youngest Child, Sex, Country and Year.

Employment Rate by Number of Children under 16, Sex, Country and Year.

Employment Rate by Age, Marital Status, Sex, Country and Year.

Child Care by Indicator, Country and Year.

Time Use by Activity, Sex, Country and Year.

Time Use of Employed Persons by Activity, Sex, Country and Year.

Time Spent in Domestic Activities by Activity, Sex, Country and Year.

Free Time spent by Activity, Sex, Country and Year.

Annex 2
Case study on participatory gender statistics training

In order to develop gender statistics, the training of statisticians is essential. In this section we will look at the comparative advantages of participatory methods of training vs. conventional methods, based on the experiences of the Gender Statistics program for Europe and Central Asian countries administered by the UNECE and the World Bank Institute[61]. The philosophy of this program is the usage of innovative participatory approaches in adult education and training, including interactive, adaptive and proactive methods, and as such, development of the ownership of the project and active participation in it of the direct beneficiaries – i.e. National Statistical Offices (NSOs) from recipient countries.

The main objective of the program is to build capacity of the National Statistical Offices in the target countries (12 EECCA and six SEE countries[62]) to improve production, analysis, and dissemination of sex-disaggregated statistics for the purpose of social and economic analysis. Within the UNECE-WBI program, self-sustainable Community of Practice (CoP) of trainers on gender statistics was created, which connected statisticians and policymakers from all the target countries. The CoP contributed to attaining the main objective of the program, especially in recognizing the importance of mainstreaming gender in all areas of statistics and making sure that data collection and dissemination take proper consideration of gender-related issues in all fields.

The Gender Statistics program is based on the assumption that adults generally assimilate only what they find useful and that they want to be able to apply their new knowledge and skills. It differentiates between traditional conventional training which views the trainee "as an empty vessel to be filled with knowledge" and participatory training which is based, instead, on an active dialogue between the trainer and trainee and constitutes a learning process for both.

Participatory approaches are recognized to be among the most effective when delivering gender sensitization training. They help to promote dialogue and the exchange of information and skills among participants, planning future actions, monitoring and evaluating gender statistics issues in NSOs. But most importantly, participatory training is fun, and is very helpful in developing interest in diverse stakeholders.

Participatory training is best distinguished from non-participatory in terms of the way it is designed and led. Non-participatory trainings are often top-down, using 'chalk-and-talk' approach, or a series of PowerPoint presentations, with the chairperson deciding on the flow of the training. Often the speaking time is directly proportional to the rank and power of the speaker. Participatory training, on the other hand, is planned and conducted in such a way that it ensures everyone has the opportunity to participate on an equal level. In addition, if learners participate actively in the learning process, training is more likely to be effective. Trainees will have more ownership in the training as their needs will have been identified and they will have been involved in deciding how their needs can be met.

The following sections go through some major steps in organizing participatory training on gender sensitization of the National Statistical Offices.

[61] In 2007, the United Nations Economic Commission for Europe (UNECE) and the World Bank Institute (WBI) launched an innovative 3-year project (2007-2010) on Gender Statistics in Europe and Central Asia. The target audience for the program is a mix of middle to high-level statisticians from regional and national statistical offices, policy makers, researchers and academia from central, federal and municipal levels. This Gender Statistics program focuses on the following issues: advocacy; gender budgeting; gender and minorities; decision-making in: public institutions, large enterprises, small enterprises; gender and labour statistics: informal employment, entrepreneurship, work/family life reconciliation; Time Use Surveys; outreach and marketing.

[62] Eastern Europe, Caucasus and Central Asia (Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Kyrgyzstan, Republic of Moldova, Russian Federation, Tajikistan, Turkmenistan, Ukraine, Uzbekistan) and South East European countries (Albania, Bosnia and Herzegovina, Croatia, Montenegro, Serbia, The former Yugoslav Republic of Macedonia).

A2.1 Preparing the participatory training

Identifying the key actors

There is a range of actors with whom to interact when planning a gender training. These will differ depending on the type of training planned. For example, the main intended audience of the UNECE-WBI program are high- and middle-level statisticians.

Building communication with key actors

First, potential participants and those who have authority over them must be convinced that the issue of gender statistics is important enough to spend time on.

For senior staff and decision makers, the message must be short but powerful. A strong message to be conveyed is that having staff capable of ensuring that the NSS's outputs are gender-sensitive will improve the quality of the products, make the data more useful to policy makers, and this will enhance the reputation of the NSS. In some cases, there might also be an obligation to produce gender-sensitive statistics. For example, in terms of a European Union agreement, or for reporting in respect to international obligations and standards, such as the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW), or within the framework of a Gender Action Plan.

At the practical level, senior decision makers will need to know that the training and any subsequent activity will not place a large burden on the organization. It is therefore important to stress whether financial or other support will be available. It must also be emphasized that for the most part production of gender-sensitive statistics is not a separate and additional task, but rather a new way of doing tasks that are already being performed. The additional resource requirements should therefore be limited.

When targeting staff, it is important that the invitation to participate in the gender training does not come across as a criticism of either their current products and way of working, or their own competence. The message needs to be that it is because of the importance and usefulness of the statistics that are being produced that there is value added in incorporating the gender perspective.

A key message should be that gender statistics is not a 'special interest group' issue or a 'women's issue'. Instead, actors need to see how enhanced gender statistics can assist them and others in carrying out their responsibilities more effectively and more knowledgeably.

In communicating with potential participants, 'training' might not always be the appropriate word for naming the event. In particular, higher level managers and policy makers will usually not be comfortable with the idea that they must be 'trained'. For them, a more appropriate word might be 'briefing' or 'consultation.' Therefore, we recommend that the training be called a 'round table,' 'conference', 'seminar' or 'workshop'.

Identification of clear objectives

In some cases a very general gender training is offered, exposing participants to basic concepts and frameworks for understanding gender issues. Such training is often referred to as gender awareness or gender sensitization training. The training envisaged in this section is different in that it is intended to result in a change in the activities undertaken by participants and their institutions. It is thus more practically oriented than general awareness-raising. Explaining the very specific and practical objectives of the training should help build communication with the different actors.

The fact that the training is practical also means that it needs to be clearly focused on particular issues. This could be a particular type of statistics (such as agricultural), or a particular instrument (such as a household survey or business register), or a particular product (such as a 'Women and Men' publication).

Ideally, there should also be a ***follow-up objective*** to the workshop in the form of some action that the organizers hope will be undertaken after the workshop has ended. Having a clear follow-up objective makes it easier to determine what needs to be covered in the workshop. It also increases the chances that participants use what they have learned in the near future. This, in turn, increases the chances that the lessons learned are fully entrenched.

Following are some examples of follow-up objectives:

Example 1. *Design of a new survey to investigate gender-based violence*.

One of the outputs of the gender-based violence training conducted in Kazakhstan in 2007 was a sample survey on gender-based violence and a

system of indicators on violence against women to be included in the national statistical classification.

Example 2. *Development of sex-disaggregated indicators.*

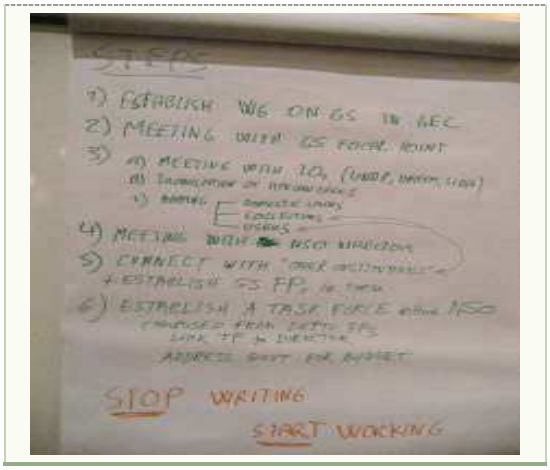
The national training on Gender Statistics for Statisticians in Kyrgyzstan (2007) focused on identifying a group of indicators that need to be disaggregated by gender.

Kyrgyzstan has also proposed a 3-year plan of action which will include a coordinated effort from the line ministries and municipal administrations, especially the Committee on Migration, as the issue of external migration ("labour migrants") currently appears to be one of the most pertinent for the country.

Example 3. *Developing action plans and further steps*

One of the closing participatory activities (brainstorming in a small group) of the Training of Trainers workshop held in Almaty, Kazakhstan in 2007[63] aimed at developing action plans and further steps in advancing gender statistics at the national level (see picture).

This activity summed up the suggested options, discussed feasibility of proposed actions and developed an action plan for the next two years. In other words, it determined clear follow-up objectives for the workshop.



This training on Gender Statistics and Informal Employment in Kazakhstan in 2007 is another example of how well-developed objectives of the event can lead to a follow-up activity. Based on gender statistics and informal employment training, Kazakhstan's NSO developed a project proposal for a 3-year program aimed at studying gender and labour market issues, including informal employment, migration, correlation between women's education and employment, and access to assets.

Example 4. *Integrating gender into NSO operations.*

The Gender Statistics follow-up objectives for Bosnia & Herzegovina in 2008-2009 were the following:

- Review the Labour Force Survey by identifying areas where gender can be further incorporated into the methodology of the LFS
- Develop training modules on the following topics: reconciliation between work and family life, informal employment, gender pay gap
- Provide training for enumerators
- Write good storylines for public releases
- Review and follow up of the LFS questionnaire in 2008 from a gender perspective and work on redesigning of LFS for 2009
- Preparation of the questionnaire for 2009 where the gender component will be included in close cooperation with the gender institutions in accordance with EU/Eurostat requirements

[63] In April 2007, a 5-day regional Training of Trainers (ToT) workshop was held in Almaty, Kazakhstan. Twenty-nine statisticians from 9 countries attended the training. In addition, the ToT was attended by representatives from UNDP, UNIFEM, UNSD, WBI, and UNECE. Please see the following UNECE website for more information: http://www.unece.org/stats/documents/2007.04.gender.htm
The Almaty ToT course was the first of the series of learning events planned for the Eastern Europe and Central Asia region for 2007-2010. The project team used participatory, adaptive, user friendly modules, customized to individual country realities and needs. The course was based 90% on interactive activities, where participants worked in teams to review case studies, pre-tabulated data or analysis, questionnaires, and other materials. Outputs of these activities included national action plans related to the improvement of the coordination/organization of gender statistics, the modification of existing data collection or dissemination tools to improve the quality or availability of gender statistics, the identification of new processes for the collection of gender-relevant data. Participants also produced advocacy material for gender statistics (such as logos, slogans) and exercised in improving writing of mass media articles to present gender analysis and graphs highlighting gender differences. Other activities included videos with interviews of famous opinion leaders from the participating countries, multimedia presentations and lectures.

- Inclusion of the gender component in questionnaires and surveys conducted by statistical institutions, wherever possible.

A2.2 Delivery phase: content and facilitation methods

Content of the training

The content of the training must relate to the objective. In broad terms the training envisaged in this manual is intended to 'engender the National Statistical System (NSS)'. This, in turn, involves introducing a 'gender lens' to all aspects of the NSS, including survey design, design of instruments, interviewers, collection, analysis and presentation of data, among others. At a practical level, the objective is to provide training that assists statisticians in producing gender-sensitive statistics. The ultimate goal is to facilitate the production of statistics that can be used for gender-sensitive policy making and for meeting the increasing demand for gender-related statistics coming from international mandates, policy makers, gender advocates and other users.

Policy orientation of the training suggests the need for content that focuses on how to present and disseminate information in a way that is most likely to be used by policy makers and those who influence them. It also suggests the need for content that determines what the likely policy issues are.

Facilitation

The term 'facilitator' implies that participants already have knowledge, and that the process involves sharing that knowledge, as well as adding new skills and information. The term 'facilitate' also relates to a style which promotes dialogue and exchange of information and skills among participants.

As important as particular skills and knowledge, is the attitude of the facilitator. The participants in most of the trainings envisaged here will be professionals. They will generally have detailed knowledge of the workings of their organization, including in relation to the particular statistics being considered. The facilitator needs to acknowledge openly that the participants have more expertise than they do on some aspects, and take their inputs into consideration. The facilitator also needs to take into account that as far as the participants are experts in different areas of statistics it might be more interesting for them to share their opinion with their peers than just listen. Therefore, it is important not to constrain the participants in expressing their thoughts (of course minding the time). The facilitator needs to think in advance on the size of the group(s) so everyone has a chance to talk (see Box A.1). The composition of the group is also important: a gender-balanced group is desirable since it will embody different levels of perception and understanding of gender issues.

Box A.2 presents some general tips on how to facilitate training, in terms of what the facilitator should and should not do.

Methodology and approach

Participatory methods of facilitation which have been used during the Gender Statistics program, and which we recommend to apply, are: lectures and presentations; demonstrations; case studies; role plays; games and competitions, small group discussions; small group exercises; and brainstorming sessions.

It is usually recommended to include a mix of methods that help to optimize learning experience and keep the participants engaged in the learning process. Further, methods which encourage active participation also generally result in better retention of learning.

Here are some examples of participatory learning methods that we have used to deliver our workshops:

1) Focused conversation method
2) Brainstorming session
3) Role play, and
4) Ranking and scoring method.

Box A.1: How the size of groups impacts participation

3-6 people	Everyone speaks
7-10 people	Almost everyone speaks Quieter people speak less One or two may not speak at all
11-18 people	5 or 6 people speak a lot, 3 or 4 join in occasionally
19-30 people	3 or 4 people dominate
30+ people	Little participation in a discussion is possible

Source: Pretty et. al. (1995)

Box A.2: Dos and don'ts

Do	Don't
Use you own best judgment at all times	Be late, rush
Introduce yourself, establish rapport	Lecture
Respect, be nice to people, be sensitive	Criticize
Share, listen, watch, relax	Interrupt
Embrace error, learn from mistakes	Dominate, monopolize
Abandon preconceptions	Present too much
Be self aware, be self critical	Take yourself too seriously
Be optimally prepared and flexible	
Have fun, enjoy	

1. ***Focused conversation method*** (also known as a structured discussion) is a technique that helps training/workshop participants to reflect on a commonly shared experience such as presentation, article, movie etc. There are four steps of the focused conversation that can lead a group to an in-depth discussion on the topic and in some cases to a plan of action and concrete decisions. These are (adapted from Spencer, 1989):

- Objective
- Reflective
- Interpretive
- Decisional.

One of the illustrations of a Focused Conversation method used in the Gender Statistics program is a set of four activities on Gender-Based Violence (see Box A.3).

2. ***Brainstorming method*** is another participatory approach widely used during training events and workshops. It can be used in both small and large groups to initiate discussion. The goal of brainstorming is to acquire from the group as much objective information as possible.

There are four main steps in the brainstorming process:

1. The facilitator poses the question and explains the objective of the discussion
2. Participants brainstorm either individually or in small groups of 3-6 people
3. Facilitator collects ideas and posts them either on the flipchart or participants read them out loud
4. Representatives from the groups with the help of facilitator draw conclusions and possibly continue discussion on possible solutions to the proposed issue etc.

One of the illustrations of the brainstorming method is the Gender Pay Gap – Data Analysis activity, which encouraged trust-building among the participants and helped in developing a common goal (see Box A.4).

3. ***Role Play method*** is considered to be an excellent tool for analysis, simulation, feedback, and communication among the participants. Role plays, in general, have a comparative advantage when considering other methods: by acting out situations, participants can uncover and discover aspects otherwise overlooked or unknown. In addition, role plays facilitate the inclusion of all group members and also encourage participation of introverted and silent participants. Role plays are especially recommended for heterogeneous groups.

The Almaty Training of Trainers (TOT) activity made use of the role play method as one of the opening activities, which helped to loosen up the participants and involve everyone in the discussion. This was especially helpful in the beginning (see Box A.5). Participants were asked to argue in support of gender statistics or against it, in the roles of an NSO Budget Officer, NSO Statistician, National Committee for Women Representative, and a NGO Representative.

4) ***Ranking and Scoring Methods*** are usually used in conjunction with other methods (for instance, combined with brainstorming or case studies) when different issues, options or data are identified and variously counted, estimated, scored or ranked.

Both methods can be used in small and large groups to quickly determine the degree of importance that the participants attribute to a particular issue.

The Almaty Training of Trainers used ranking and scoring methods to introduce such a sensitive subject as gender-based violence and thus release the initial strain towards this topic, especially among male participants (see Box A.6).

Box A.3: Gender-based violence focused conversation

Steps	Content	Type of question
Objective	Activity 1 **Gender-Based Violence - Quick Survey & Competition** Participants are introduced to the subject of gender-based violence and its relevance to their country. Participants also share their knowledge on the subject matter, existing data and facts	Do you think there is gender-based violence in your country? How open is your culture for a debate of this issue? How would you rate the quality of the data regarding this issue in your country?
Reflective	Activity 2 **Video clip on domestic violence** The purpose of this activity is to see participants' personal feelings to the subject matter	What struck you most in the situation of the women portrayed? What implication has the given information on your work?
Interpretive	This activity analyzes the meaning and significance that participants attach to the subject	What is the significance of the problem? What are the consequences of not handling gender-based violence issues in your country?
Decisional	Activity 3 **Gender-Based Violence - Advocacy** Participants learn about and discuss what is necessary to put gender-based violence on the agenda of decision-makers in national statistical offices.	Think of ways to convince your manager of the importance of this topic. What stakeholders would you involve in the dialogue to guarantee a successful roll-out of the survey?
Closing	Activity 4 **Multimedia presentation "Gender-Based Violence - Action Plan"** Participants learn different approaches that can be taken by a national statistical office and develop a country-based action plan. Based on 3 case studies presented, participants in teams choose one of three alternative improvement actions for their country.	1. Include reporting on domestic violence in the national registration system 2. Include a module on violence against women in an ongoing survey 3. Develop a new, specialized survey on violence against women

Box A.4: Brainstorming: Gender Pay Gap data analysis

OBJECTIVE

Participants will understand how gender pay gap is calculated. They will develop arguments to convince sceptical people/statisticians on the importance of gender pay gap data for policy making

PARTICIPANTS

8 – 40

TIME

60 minutes:

- 5 minutes - group set-up and briefing

- 30 minutes - group work on gender pay gap within countries using data from imaginary company, developing arguments on importance of gender issues in wages data

- 25 minutes - reporting on the outcomes

FLOW

- The facilitator forms teams of 4-6 persons which are randomly put together.

- The facilitator explains the objective of the session and hands out a data sheet of a fictitious company and gives the following guiding questions and tasks:

- What is the effect of different data on hourly, monthly, annual wages? Explain the reason for differences.

- Which data are better from a gender perspective?

- Some people believe that differences in wages for men and women are related to different choices rather than gender roles, discrediting the use of this indicator for gender equality. Participants are asked to develop convincing arguments on the need to use this indicator for policy making.

- The teams note their findings on flipcharts and report to the rest of the group.

Box A.5: Role play

OBJECTIVE

To convince the NSO to organize gender sensitization training for their staff and to gain a better understanding of the different players and their specific objectives and agendas.

PARTICIPANTS

8 – 40

TIME

90 minutes:

-5 minutes – facilitator creates and briefs four teams

-25 minutes – team role play

-5 minutes– new groups formed out of representatives of each roles

-25 minutes– discussion in teams of representatives

-10 minutes– group discussion and summary

FLOW

-The participants are placed into one of the following four teams:

1) NSO budget officer;

2) NSO statistician;

3) National Committee for Women representative;

4) NGO representative.

-The facilitator briefs the four teams by explaining what their specific role is.

-Each team looks at the issue from their own perspective. The teams are asked to work out arguments supporting their role.

-The facilitator hands out a number to the representatives of each group/role. (If there are 5 team members, the numbers 1-5 get handed out at each table, etc.).

-Each role member with a certain number joins a table and meets together with the other role players to discuss the topic. Now the representatives have the objective to best defend their role by giving the arguments they have previously developed.

-The facilitator asks each table to report on the process, arguments and outcomes of the discussion.

Box A.6: Ranking: gender based violence - quick survey & competition

OBJECTIVE

Ice-breaker activity to introduce the sensitive subject of gender based violence and violence against women. At the end of the activity the facilitator and the participants get a feel of the group's general thoughts on the subject matter and its relevance for the specific country context.

PARTICIPANTS

8 - 40

TIME

45 minutes:

-15 minutes per question + debrief

FLOW

- The facilitator forms teams of 4-6 persons which are randomly put together (or, if it is worth exploring, divided by gender).

-The facilitator asks a question to the group and asks them to rate it on the scale from 1 to 10 (1= not relevant /bad, 10= very important / good):

1. "Do you think there is gender-based violence in your country?"

2. "How open is your culture for a debate on this issue?"

3. "How would you rate the quality of the data regarding this issue in your country?"

-The facilitator asks a volunteer from the group to be the assistant for this activity.

-The participants write a number on a piece of paper and the facilitator collects the papers and hands them to the assistant to calculate the group's average rating.

-The facilitator asks the group to guess the result and to write it down in bold letters on a letter size (A4) paper and then asks all participants to hold up the number they wrote down.

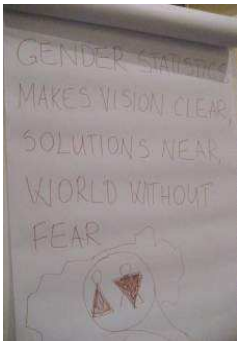
- The assistant goes through the group and determines the participant with the number closest to the mean.

The participant with the closest number to the mean "wins". The facilitator hands out a prize to the winner.

The facilitator thanks the assistant for doing a great job and gives her/him a prize as well.

The choice of one of these methods or a combination of some of them will depend in part on the objectives of the workshop. For example, a practical workshop intended to impart skills is likely to include more hands-on exercises in small groups or individually. The methods chosen also depend on the audience. For example, a higher-level audience might consider some 'games' to be beneath them. In practice, however, one sometimes finds that even high-level audiences appreciate being given some time to have 'fun'.

For example, high-level statisticians from the Almaty TOT appreciated the fun of some of the activities (particularly developing the "Why do we need Gender Statistics" slogan) and came up with several creative ideas (see photos).



A2.3 Sustaining learning through Communities of Practice

To ensure the sustainability of the training program, where possible, trainers and participants should be included in a Community of Practice (CoP) (see Box A.7).

A CoP was created within the UNECE-WBI program on Gender Statistics. During the first Regional Training of Trainers workshop, UNECE and WBI connected the trainers from several countries in a community and, by engaging them into interactive learning during the workshop, built trust among them. All of the participants of this Regional TOT workshop were invited to become members of the Community of Practice of trainers on gender statistics, a network of practitioners actively involved in the collection, production, analysis and dissemination of sex-disaggregated data in their respective countries – statisticians, staff from the Ministries, NGOs, think tanks, and international organizations.

New technologies such as the Internet have extended the reach of interactions beyond the geographical limitations. To better facilitate day-to-day communication and regular connection, an interactive web-portal was created for this CoP, which can be used by members for the following:

- hold electronic discussions, pose questions to well-known gender experts from international organizations and the Task Force on Gender Statistics (who are also members of this CoP)
- post announcements about upcoming events and trainings on related topics in their countries
- get recent and reliable data from Gender Statistics databases from the UNECE and the World Bank
- read and study any of the modules taught during the Regional Workshop and national courses organized in each of the countries
- download multi-media self-running presentations
- share their training and teaching experiences with peers from other countries or video interviews with influential opinion leaders for advocacy of gender statistics
- learn about advocacy and facilitation techniques
- get information about international conferences and Expert Group Meetings on the subject of gender statistics
- communicate on a daily basis with colleagues from other countries and experts.

Box A.7: Community of Practice

The term "Community of Practice" is relatively recent, even though the concept it refers to is very old. The concept provides a useful perspective on knowing and learning.

Communities of Practice are groups of people who share a common concern or a passion for something they do and learn how to do better as they interact regularly. In pursuing their interest in their domain (in our case it is statistics), members engage in joint activities and discussions, help each other, and share information. They build relationships that enable them to learn from each other.

A growing number of people and organizations in various sectors and countries are now focusing on Communities of Practice as a key to improving their performance and connecting people. See, for example, UN-INSTRAW's CoP at http://www.un-instraw.org/gtcop/

In addition to this interactive web-portal, regular Regional Meetings were held twice a year, and exchange of experts/trainers between countries, as well as field trips, were conducted on a regular basis.

A website in itself is not a community of practice. Members of a CoP need to interact and learn together, and develop a shared repertoire of resources: experiences, stories, tools, ways of addressing recurring problems. The practice of a community is dynamic and involves learning on the part of everyone, and this takes time and sustained interaction. Elements of a CoP include: problem solving, requests for information, seeking experience, reusing assets, coordination and synergy, discussing developments, collective responsibility for managing the knowledge needed.

Training on gender statistics can be very successful and rewarding if an opportunity for sustaining such a community of practice exists. UNECE and WBI established a recognition structure: more active training teams are selected for participation in global conferences and Expert Group Meetings (e.g. UNECE Annual Conference of European Statisticians in Geneva, Switzerland, or Global Conferences on Gender Statistics). Peer recognition, community-based feedback and acknowledgement mechanisms are important to celebrate community participation. Sharing knowledge is a source of power and growing reputation. Incentives should be given to the community members for their active involvement.

This initiative of UNECE and WBI proved to be a great success. Trained statisticians became active members of the Community of Practice: enthusiastic trainers themselves who organize and teach national courses in their respective countries. They make up a team connected by a common interest: gender sensitization and training on gender statistics. They learn by doing and through personal experimentation and practice, sharing the tacit knowledge with each other.

A2.4 Lessons learned

Based on the experiences of planning and preparing the Gender Statistics program, the following points are recommended:

1. If possible, acquire information on the participants' expectations of the meeting. For example, by using a Needs Assessment exercise (See Box A.10). However, sometimes this can be avoided if the target audience is reluctant to engage in some of the participatory methods (senior staff sometimes is).

Sample questions to be used:

- What are your expectations for this workshop?
- How can this workshop be beneficial to your current work?
- What areas of gender statistics are of more importance to your NSO at the moment (if any), and what other areas would you like to study?

2. Prepare a detailed draft agenda including: the objectives *(e.g. build gender competence; help statisticians and users define how to make statistics more gender-relevant; change NSSs so that they can produce better statistics that enable policy makers to design, monitor and evaluate policies which can have a positive impact on the life of women and men),* expected results, format, duration, etc. of each item or session

3. Build communication within the NSO and with external users

4. Select the right trainer or facilitator (see criteria above). If an outside neutral facilitator is used, him/her should be involved in the planning process as early as possible

5. State the importance of gender balance in the selection of trainers, facilitators, and participants

6. Check if all the logistical issues are resolved before the event. Visit the meeting location ahead of time in order to ensure adequate space, appropriate seating arrangements, and the necessary for the meeting (such as name tags, flip-charts, paper, pens, markers and handouts)

7. Attention should be paid to five key aspects of planning and conducting successful participatory events (see Box A.8):

***S**pace*: It is important to find an appropriate venue for the event as it usually affects the quality of the learning experience. Attention should also be paid to seating arrangements, light, temperature, equipment, location, etc.

***T**ime*: Time management is essential for a successful training. However, be advised that you might need to adjust pace to the agenda items. Be constantly aware of the timeframe and do not allow participants to spend more time on some of the activities.

***E**ventfulness*: Be sure to create an event that emotionally connects, engages and challenges the participants. It is important to break the formality of the event, especially among senior officials. It could be very helpful to use ice-breaking exercises, humour, change in pace, awards, prizes, etc. to put people at ease and sustain their personal involvement.

***P**roduct*: In the beginning of the training, identify the main goal or expected outputs of the training and keep participants focused on it throughout the event.

***S**tyle*: Try to adapt your personal style according to the type of activity and formality of the event (e.g. mostly senior officials present).

Box A.8: S.T.E.P.S. for successful participatory meetings

S	T	E	P	S
Balance	Pace	Change of pace	Case studies	Location
Preparation	Agenda	Celebration	Charts/ Figures	Audio/ Visuals
Body Language	Format	Humour	Activities	Multimedia presentation
Honouring everyone	Breaks	Awards	Documents	Décor/ Setting
Keeping on track		Prize	Community of Practice	Seating arrangement

Source: Spencer, 1989.

8. The facilitator for the gender sensitization training is also suggested to follow four basic planning steps designed to determine the purpose, outputs, operational plan, and monitoring of the training[64] (see Box A.9).

In sum, designing training programs for participatory learning on gender statistics is not a simple matter. These training activities do not involve lecture-based transfers of information from trainer to learner. Participatory training involves the beneficiaries from the early stages of planning throughout the implementation and completion of the training. Planners who design training programs should be prepared to ask and answer questions about the nature and expected outcomes of their initiatives. They must be prepared to engage in consultations with diverse groups of stakeholders and be ready to respond to the needs and views of those stakeholders. Most importantly, planners must work hard to identify and explore on a day-to-day basis relevant communication activities, systems, tools and mechanisms. It is within these communication activities that the planner of training programs on gender statistics has the empowering opportunity to become a learner and an active member of the Community of Practice.

The experience of the UNECE-WBI program appears to be very effective in organizing gender sensitization training. It allowed the participants to be very much involved in the whole process, thus owning their respective national program and belonging to the Regional Community of Practice at the same time. Establishment of the Community of Practice ensures long-term engagement and sustainable capacity in the National Statistical Offices. Practitioners establish a special connection with each other as they share actual experiences. They understand each other's stories, difficulties and insights. This allows them to learn from each other and build on each other's expertise.

It is imperative to involve statisticians and trainers in the full cycle of the program's planning, implementation, monitoring and evaluation. It is important that they feel ownership of the program activities and participate in their design; reflect the program's positive results into their work; and exchange knowledge with their peers. Unless the direct beneficiaries are engaged in this learning cycle, there will be no true learning.

*General questions for **national workshops**:*

"What are your expectations for this workshop?"

"What are your previous experiences in training?"

"Irresolvable issues: What will this training not be able to address?"

"How can this workshop be beneficial to your current work?"

*Questions for **ToT**:*

"What are your expectations for this workshop?"

"How can this workshop help you to become a better trainer?"

"What are the content areas in which you need more support? (obstacles and challenges)"

"What are your previous experiences in training and as a trainer?"

[64] Source: Participatory Methods for Situation Analysis and Planning of Project Activities. Humbolt-Iniversitat zu Berlin. Berlin. 1994.

Box A.9: Gender statistics participatory training matrix		
Step	**Activity Content**	**Questions**
Opening	The participants are divided into 6 groups: - In each group, participants introduce themselves and explain the meaning of their name. - The facilitator asks each group to report on the most interesting or fun name / personal presentation to all the participants	What is the most interesting or fun name?
1. Purpose (Why are we doing this activity?)	**Needs Assessment Activity**	What are your expectations for this workshop? How can this workshop be beneficial to your current work?
2. Output (What do we want to achieve in a certain time?)	**Role Play Activity** The ultimate goal of the training is to overcome reluctance of the NSOs and convince them to organize gender sensitization statistical training for their staff and to gain a better understanding of the different players and their specific objectives and agendas. Participants in four teams argue the case for organizing statistical training for gender sensitization of NSO staff from a different perspective. The four different perspectives are NSO budget officer, NSO statistician, National Committee for Women representative, NGO representative. **Why do we need gender statistics? - Group Discussion Activity**	What do we want to achieve in a certain time? Who could be helpful in promoting the idea of gender statistics?
3. Operational plan (Who is going to do what, when, and where? What materials, resources are necessary?)	Activities: • Facilitation techniques • Advocacy: Why do we need gender statistics? Slogan • Making it Happen - case studies • Reconciliation between work and family life • Informal employment • Gender pay gap • Gender pay gap - data analysis • Gender-based violence • Entrepreneurship • Decision making in the economy • Minorities • Gender budgeting - poster design • Dissemination and Marketing: principles of good chart design	What worked well and what could have been improved in the trainings that you participated in before?
4. Monitoring	Constantly check if you are focused on the goal and expected outputs of the training and keep participants focused on it throughout the event	Are we following the plan?
Closing	Activities: • Hitting the Nerve: Targeting Participants • Making It Happen - Building Commitment and Partnerships • Fix the article	Identify barriers and challenges in mainstreaming gender in your organizations. How to overcome these barriers?

Box A.10: Needs assessment exercise

Facilitation Guidelines used within the UNECE-WBI training program on Developing Gender Statistics

PARTICIPANTS

8-40, in teams of 5-6 participants

TIME

60 minutes:

- 5 minutes facilitator creates and briefs 6 teams
- 20 minutes group work
- 20 minutes representative team discussion
- 15 minutes group discussion and summary

ROOM SET-UP

- Tables with 5-6 chairs/table.

SUPPLIES

One flipchart per team, alternatively poster-size papers that can be attached to a wall, calculator for each team

PREPARATION

Nil by participants. Presenter to make copies of the handouts to each team

FLOW

- The facilitator divides participants into groups of an appropriate size
- The facilitator asks each group to come up with ideas on their "topic" and write them on a flip chart
- Each group presents their ideas in a short presentation
- The flip charts serve as the guideline for the course. (The facilitator needs to make sure he/she covers all expectations.)