Policy cycle in research

Define

Plan

Act
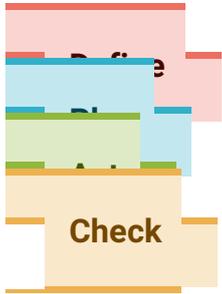
Check

In this phase, it is recommended that information is gathered on the situation of women and men in a particular area. This means looking for sex-disaggregated data and gender statistics, and checking for the existence of studies, programme or project reports and/or evaluations from previous periods.

> Did you know that EIGE has a Gender Statistics Database? Check whether there are relevant statistics to feed into your analysis.

Examples of gender and research statistics

European Commission, Directorate-General for Research & Innovation: The She Figures report

European Commission, Directorate-General for Research & Innovation: The She Figures report is the main source of pan-European comparable statistics on the state of gender equality in research and innovation. Published every 3 years since 2003, She Figures is the European Commission's publication that presents human resource statistics and indicators in the research and technological development (RTD) sector and on gender equality in science. It provides information on the situation of women in science and research, based on data collected every 3 years by the European Commission's Directorate-General for Research & Innovation, in close cooperation with the Helsinki Group on Women and Science and its statistical correspondents. It covers a wide range of themes, including the proportions of women and men among top-level graduates, academic staff and research/advisory boards, the working conditions of women and men researchers, the integration of the gender dimension in the content of peer-reviewed scientific articles, and various indicators measuring gender gaps in scientific and innovation outputs. In She Figures, the joint repository for these data are referred to as the Women in Science database (WiS).

In 2012, the European Commission published the fourth She Figures. In July 2015, preliminary findings of the She Figures 2015 report were published (the full report is due to be released at the end of 2015).

The Eurostat Statistics on Research and Development

The Eurostat Statistics on Research and Development is a collection that provides data concerning R&D expenditure and R&D personnel broken down by the following institutional sectors: business enterprise (BES), government (GOV), higher education (HES) and private non-profit (PNP). It also provides the total of all sectors. All data are broken down by the sectors of performance. R&D personnel data are available in full-time equivalent (FTE), in head count (HC), as a percentage of employment, and as a percentage of the labour force. The data are further broken down by occupation, qualification, sex, size class, citizenship, age groups, fields of science, economic activity (NACE Rev. 2) and regions (NUTS 2 level). At EU level, the sector is the basis for the calculation of the main sex-disaggregated indicators concerning R&D, in particular for the She Figures publication and database.

The UNESCO Institute for Statistics (UIS)

The [UNESCO Institute for Statistics (UIS)](#) began to study science, technology, engineering and mathematics (STEM) gender indicators in 2006. It follows an innovative methodology. In 2007, the UIS, together with UNESCO's Natural Sciences Sector, published the first international report on science, technology and gender. Through its biennial survey and partnerships with other statistical organisations, the UIS collects cross-nationally comparable, gender-disaggregated statistics on research and experimental development – by sector, area of research and level of education – for more than 200 countries and territories. These data are used to support national and international policymaking to promote gender equality in science and technology and to expand the role of women in all fields of scientific research.

MORE2 (funded by the European Commission, Directorate-General for Research)

[MORE2](#) (funded by the European Commission, Directorate-General for Research) is a study that intends to provide 'support for continued data collection and analysis concerning mobility patterns and career paths of researchers', as provided for under the 2010 People Work Programme of the Seventh Framework Programme. This foresees support for continued data collection and analysis and provides the opportunity to consolidate, improve and refine the results achieved under MORE1. Within this framework, a set of internationally comparable indicators on stocks, flows, working conditions and career paths of European researchers, as well as a database, were implemented. Indicators on the stock, employment situation and mobility of researchers in all EU countries in 2012 are presented, 'disaggregated by sex'.

Examples of studies, research and reports

European Commission, Meta-Analysis of Gender and Science Research

This report sets out the first comprehensive view of experiences and practices in Europe and abroad relating to women and science research. Its aim is to collect and analyse research on horizontal and vertical gender segregation in research careers, as well as the underlying causes and effects of these 2 processes. The objectives of the study were to thus provide an exhaustive overview and analysis of research on gender and science carried out at the European, national and regional levels; to make the study results accessible to researchers and policymakers via an informed bibliography (online database) and a set of reports; and finally, to steer policymaking on gender and science and define future research priorities within the framework programme, in particular through examples of good practice and gap analysis in the various research topics.

European Commission – Directorate-General for Research, Mapping the Maze: Getting more women to the top in research

The report presents a summary of the situation in the field of research decision-making, with the aim of identifying problem areas and recommending changes. The report does not cover all the possible sectors in which research in Europe is performed. Nevertheless, the conclusions may still apply to a wide range of sectors (institutions of higher education, public and private research institutions, membership organisations such as science academies, non-governmental/non-profit organisations and commercial enterprises).

European Commission – Directorate-General for Research, Stocktaking 10 years of 'Women in Science' policy by the European Commission 1999–2009

This report describes and assesses the large number of projects funded by the Sixth and Seventh European Framework Programmes for Research and Technological Development, highlighting their contribution to 2 major steps: the first aimed at encouraging, preparing and adapting women to the existing research system, and the second aimed at adapting the research system to women's needs (structural change).

European Commission – Directorate-General for Research, Gender research in the 6th Framework Programme and the first period of the 7th Framework Programme: Socio-Economic Sciences and Humanities Programme

This compendium is intended to be a useful reference for anyone interested in gender research. It presents the wide range of activities carried out under the Sixth and the beginning of the Seventh Framework Research Programme in the field of socioeconomic sciences and humanities. These pursued both gender-specific research as well as the mainstreaming of gender issues in research.

European Commission – Directorate-General for Research & Innovation, Gender Equality Policies in Public Research

> This [report](#) is based on a survey among the members of the Helsinki Group, the Commission's advisory group on gender, research and innovation. It gives a detailed analysis of the current state-of-play in terms of EU Member States' and associated countries' initiatives for promoting gender equality in research and innovation.

> Did you know that EIGE has a [Resource and Documentation Centre](#)? Check whether there is relevant information to feed into your analysis.

One of the first steps to take when defining your policy/project/programme is to gather information and analyse the situation of women and men in the respective policy area. The information and data you collect will allow an understanding of the reality and assist you in designing your policy, programme or project. Specific methods that can be used in this phase are gender analysis and gender impact assessment.

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Examples of gender analysis

European Commission, Gendered Innovations – How Gender Analysis Contributes to Research: Report of the expert group 'Innovation through gender'

> This [publication](#) includes case studies as concrete illustrations of how gender analysis leads to new ideas and excellence in research in several fields such as health and medicine, environment and climate change, food and nutrition, transport and technological development.

L. Schiebinger, I. Klinge, A. Arlow and S. Newman, 'Introduction', in L. Schiebinger and I.

L. Schiebinger, I. Klinge, A. Arlow and S. Newman, introduction, in L. Schiebinger and I. Klinge (eds.), **Gendered Innovations: Mainstreaming Sex and Gender Analysis into Basic and Applied Research: Meta-Analysis of Gender and Science Research – Topic Report**

This text presents the main steps to be followed when performing gender analysis in the research sector.

An example of gender impact assessment

European Commission – Directorate-General for Research/Science and Society/C.5 Women and Science, Gender in Research: Gender impact assessment of the specific programmes of the Fifth Framework Programme

This report presents a synthesis of the key findings and recommendations of 7 studies carried out as part of the gender impact assessment exercise, launched by the European Commission in June 2000, with a view to assessing the way in which gender issues are being addressed within the Fifth Framework Programme (FP5). It entails specific recommendations for mainstreaming gender in the framework programme implementation cycle and research areas.

Examples of stakeholders that can be consulted

European Platform of Women Scientists

The European Platform of Women Scientists (EPWS) is an umbrella organisation bringing together networks of women scientists and organisations committed to gender equality in research in all disciplines in Europe and the countries associated with the EU's Framework Programmes for Research and Technological Development. The platform welcomes researchers working in any discipline and working in science in its widest sense, ranging from the natural to the social sciences, and including, but not restricted to, science, engineering and technology. EPWS currently includes more than 100 member organisations and represents more than 12 000 women researchers all over Europe who are active in academia and industrial research.

GenderSTE

This is a COST-funded network for the promotion of gender equality in research and innovation. It organises awareness-raising events across Europe.

GenPORT

> [GenPORT](#) is a developing online community of practitioners, served by an Internet portal and made up of organisations and individuals working across the globe for gender equality and excellence in science, technology or innovation.

> For a more detailed description of how gender can be mainstreamed into this phase of the policy cycle, click [here](#).

In this phase, it's appropriate to analyse budgets from a gender perspective. Gender budgeting is used to identify how budget allocations contribute to promoting gender equality. Gender budgeting brings visibility to how much public money is spent on women and men respectively. Thus, gender budgeting thus ensures that public funds are fairly distributed between women and men. It also contributes to accountability and transparency about how public funds are being spent.

Example of gender budgeting in research

The Women's Academy Munich regulation association (FAM Frauenakademie München)

> The [Women's Academy Munich regulation association](#) (FAM Frauenakademie München) undertook a project, Gender budgeting as an instrument for managing scientific organisations to promote equal opportunities for women and men – with the example of universities, in 2007. This is a transnational EU project (carried out in Germany, Austria and Poland), showing which dimensions and which phases of the budgeting process have to be considered. It provides basic steps for systematically integrating gender issues into the budgeting process in research and scientific organisations.

Examples of indicators for monitoring gender and research

Share of women researchers, by sectors of performance

This [indicator](#) is calculated as the percentage of women researchers out of the total number of researchers. It can be calculated as a percentage of the total researchers in all sectors or disaggregated by sector (business enterprise: BES, government: GOV, higher education: HES, private non-profit : PNP). This indicator provides a means of measuring gender imbalances in research. The indicator is available in head count (HC), i.e. people employed, and in full-time equivalents (FTE).

The latest figures are from 2011, when 33% of researchers in all sectors were women. The indicator is available from Eurostat's Statistics on Research and Development – R&D personnel at national and regional level (online data code: rd_p_femres).

Proportion of women researchers in the sectors of performance, by fields of science

This [indicator](#) is calculated as the percentage of women researchers out of the total researchers in each sector of performance (business enterprise: BES, government: GOV, higher education: HES, private non-profit: PNP) and in different field of sciences (natural sciences, engineering and technology, medical and health sciences, agricultural sciences, social sciences and humanities). The indicators provide a means of measuring gender imbalances in the field of research. The indicators can be calculated using the number of women and total head count (HC), derived from Eurostat Statistics on Research and Development – R&D personnel at national and regional level (online data code: rd_p_perssci).

Proportion of women in a grade A academic position

This indicator is calculated as a percentage of women in a grade A academic position out of the total members of academic staff at grade A. Grade A is the single highest grade/post at which a researcher is normally employed. The statistics on the seniority of academic staff are collected at the national level through higher education and R&D surveys or directly from higher education institutions as part of their own monitoring systems and administrative records.

This indicator is included in the set of indictors for monitoring [Area B of the Beijing Platform for Action – 'Education and Training of Women'](#). Data are available on the Women in Science (WiS) database , which was implemented for the realisation of [She Figures](#) reports by DG Research & Innovation and is updated triennially with every new edition of the [She Figures](#). The latest available data are from 2010 and show that women represent only 20% of academic staff at grade A.

Examples of procurement

European Commission, The gender challenge in research funding: Assessing the European national scenes

> This [report](#) focuses on research funding across Europe, mainly but not exclusively from a gender perspective. It is the result of the work of an EU expert group set up by the European Commission to provide 'recommendations on the improvement of transparency and accountability of procedures used in selection committees for grants and fellowship awards, and access to research funding in general'. The report analyses the gender dynamics among applicants, recipients and gatekeepers of research funding, in funding processes, instruments and criteria, and the role of key funding organisations in promoting gender equality in research. An overview of the national situations in terms of research landscape and gender settings is annexed to the report.

> For a more detailed description of how gender can be mainstreamed in this phase of the policy cycle, click [here](#).

In the implementation phase of a policy or programme, ensure that all those involved are sufficiently aware about the relevant gender objectives and plans. If not, set up briefings and capacity-building initiatives according to staff needs. Think about researchers, proposal evaluators, monitoring and evaluation experts, scientific officers, programme committee members, etc.

Example of capacity-building initiatives on gender and research

Gender in EU-funded research

> [Gender in EU-funded research](#) is a training programme was financed under the Seventh Framework Programme (FP7) by the European Commission, delivering 73 one-day training sessions across the EU on 'gender in EU-funded research'. A toolkit and training activities are available on the website.

The Association of Commonwealth Universities

[The Association of Commonwealth Universities](#) has prepared a training module, Introduction to gender mainstreaming universities, which presents several activities/exercises to mainstream gender within universities. A specific chapter is dedicated to Methods of mainstreaming gender into the academic curriculum/discipline/department.

Practising gender equality in science, guidelines for gender equality programmes in science

[Practising gender equality in science, guidelines for gender equality programmes in science, 2009](#), is based on the collation and assessment of practices developed in Europe, North America and Australia. These guidelines aim to best exploit the available theoretical and practical knowledge on how to promote gender equality in science and technology. The guidelines are intended to be useful to universities, research centres and other stakeholders in terms of implementing institutional and cultural change in favour of greater inclusivity for women scientists and improving working conditions for women (and men) on their premises.

Example of gender language in research

L. Husu and L. Tainio, 'Representations of women scientists in Finnish print media: Top researchers, multi-talents and experts', in L. Mattfolk, S. Nordlund-Laurent and J. O. Ostman, (eds.), Language, politeness, and gender, Nordica Helsingiensia, University of Helsinki, Helsinki, 2007. The use of language and concepts can determine the direction of scientific practice, the questions asked, the results obtained and the interpretations of those results. This study points to the use of language in programme materials and how this can constitute and create gender bias, or simply fail to take account of gender differences.

A policy cycle or programme should be checked both during – **monitoring**, and at the end – **evaluation**, of its implementation.

Monitoring ongoing work allows those involved to follow up progress and remedying unforeseen difficulties. This process should take into account the indicators set out in the planning phase and data collection based on those indicators.

At the end of a policy cycle or programme, a gender-sensitive evaluation should take place. Make your evaluation publicly accessible and strategically disseminate its results to promote its learning potential.

Examples of monitoring and evaluating gender in research

European Commission – Directorate-General for Research & Innovation, Indicators for promoting and monitoring responsible research and innovation: Report from the expert group on policy indicators for responsible research and innovation

Early in 2014, the European Commission appointed an expert group 'to identify and propose [indicators](#) and other effective means to monitor and assess the impacts of responsible research and innovation (RRI) initiatives, and evaluate their performance in relation to general and specific RRI objectives'. This report presents the results of the work of the expert group. It contains 3 parts: first, a conceptual introduction of RRI; second, a detailed review of possible indicators in 8 key areas for RRI policy; and third, a number of concrete proposals for indicator design and implementation. One of the 8 key areas is gender equality.

European Commission – Directorate-General for Research, Monitoring Progress towards gender equality in the Sixth Framework Programme – Synthesis Report

This [report](#) presents a synthesis of 6 gender monitoring studies carried out by research teams representing universities, research institutes and organisations specialising in gender research. The studies were commissioned by the European Commission to monitor advancement towards gender equality, both at project and programme level.

For a more detailed description of how gender can be mainstreamed in this phase of the policy cycle, click [here](#).