



Strategy for gender mainstreaming

**A presentation of Formas' gender
mainstreaming efforts for 2022–2025**

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Foreword

In Formas' appropriation directions, the agency is tasked with continuing our gender mainstreaming efforts so that our operations can help achieve national policy goals for gender equality. This strategy contains the roadmap that will guide our efforts.

Formas' strategy for gender mainstreaming sets out the direction of our gender mainstreaming efforts. It describes our overarching goals and the areas we will prioritise for the period 2022–2025.

The strategy was adopted on 31 August 2021.

Ingrid Petersson
Director General

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Summary

In Formas' appropriation directions, the agency is tasked with continuing its work on gender mainstreaming so that our operations can help achieve national policy goals for gender equality (M2020/01517). Our mission must be reported on by 1 September 2021. This strategy contains the roadmap that will guide our efforts.

Formas' strategy for gender mainstreaming sets out the direction of our gender mainstreaming efforts. It describes our overarching goals and the areas we will prioritise for the period 2022–2025. During the programme period, the focus of our efforts is twofold: developing decision-making input for the areas and processes prioritised in our development efforts, and determining the need for increased collaboration in order to achieve the agency's overarching goals for gender mainstreaming.

Formas' overarching goals for the programme period are as follows:

- **Provide knowledge that highlights the conditions and circumstances of different groups in society.** This goal aims to ensure that the knowledge we build up and convey within the framework of Formas' operations is inclusive and, in a relevant way, reflects the conditions and needs of different groups in society. The direction of our efforts in this goal includes broadening participation from different scientific and research disciplines, including various stakeholders, to work to ensure that funded research and innovation largely integrates a sex or gender perspective and improves accessibility to the results.
- **Ensure that researchers and collaborators have equal opportunities to access Formas' funding and other activities.** This goal ensures a gender-balanced distribution of Formas' funds. It addresses the granting process as well as the percentage of female and male researchers and collaborators who are granted funding from us and to what extent. It also addresses the need to ensure equal participation in other activities and tasks that we carry out, such as evaluations, communication efforts, conferences, reports and systematic research reviews. The direction of our efforts in this goal includes striving for a responsible assessment and evaluation of research and innovation, developing our system for data collection and statistics, and developing analyses that take into account how our funding budget is distributed with respect to gender.
- **Promote a gender-balanced research and innovation system through collaboration.** This goal concerns structural conditions in research and innovation, for example in terms of career progression and development, and how both Formas' operations and our opportunities for collaboration can make these conditions more equal. The direction of our efforts in this goal includes collaboration with other stakeholders to improve the merit system in research and innovation, conducting a pilot project in partnership with

research-performing organisations around how our operations can affect conditions for gender equality, and increased collaboration with other government agencies and organisations on gender mainstreaming.

A long-term strategy for gender mainstreaming should be applicable over a longer period of time and not require updating unless Formas' mandate or direction changes significantly. The strategy will be complemented by an action plan developed for relevant operational areas and work processes. The action plan formulates how we can address inequality problems, as well as the analyses, development efforts, activities and results necessary for achieving and ensuring the overarching goals. At the end of the programme period, an evaluation of implemented activities and actions is planned.

Formas' strategy for gender mainstreaming

About our gender mainstreaming mandate

Gender mainstreaming is the main strategy used by the Swedish government and parliament to achieve its policy goals for gender equality. Gender mainstreaming means taking a gender perspective into account in all policies that affect the human condition, so that all women and men and all girls and boys can live their lives on equal terms. The government's development programme, "Gender equality in public services", aims to make government agencies in Sweden better at contributing to the policy goals for gender equality. During the period 2020–2025, the government gave 54 agencies a special gender equality mandate. Agencies must both identify and address inequality in their core operations and help to increase gender equality in society. The Swedish Gender Equality Agency is the authority tasked with ensuring that the priorities in the government's gender equality policy have an impact. It is also tasked with supporting progress on gender mainstreaming on the part of all public authorities.

In this mission and in the development of gender mainstreaming for the programme period, special emphasis is placed on achieving effects throughout society on the part of the agencies together with relevant stakeholders.

In addition, the government stresses the following:

- In addition to sex or gender, a gender equality perspective should also include other related categories, such as age and ethnicity.
- The agencies should take note of the synergies that can be achieved between the gender mainstreaming mandate and other missions, such as Agenda 2030.
- The agencies should develop and use gender budgeting as a tool for gender mainstreaming.

Formas' gender equality mandate

Since 2016, Formas been tasked with integrating a gender perspective and promoting gender equality in its allocation of research funds. Formas must also work to ensure that sex and gender perspectives are integrated in research and innovation activities, whenever applicable. With the government's new programme period in the development programme for gender equality in public services, and in accordance with the 2021 appropriation instructions, Formas must continue to develop its gender mainstreaming efforts and submit a report on its progress by 1 September 2021 for the period 2022–2025. This strategy contains the roadmap that will guide our efforts.

Formas had a previous mandate related to gender equality in public services within the framework of the government's first programme period. The mandate was in force for the period 2017–2018.

¹The overarching goal for gender equality policy is to enable both women and men to hold the same power to shape society and their own lives. The overarching goal is broken down into these six objectives: an even distribution of power and influence, economic equality, equitable education, equal distribution of unpaid housework and caregiving, equitable health, and ending men's violence against women. Written communication 2016/2017:10. Ministry of Health and Social Affairs, p. 8.

In October 2016, in accordance with the prevailing mandate at the time, we established an action plan for the gender mainstreaming of our operations. The plan formulated several long-term goals that concerned Formas' core business (research funding) as well as a number of development initiatives and activities required to achieve the goals.

Since the previous plan for gender mainstreaming was developed, both Formas and the world around us have undergone major changes. New missions and departments have been added to our operations, and the number of employees has more than doubled at Formas. The government's gender mainstreaming mandate has also evolved, for example through its emphasis on collaboration between public agencies and others to achieve impact throughout society. We thus see a need to develop a gender mainstreaming strategy that is aligned with prevailing circumstances, both internal and external, and the operations Formas currently conducts.

Formas' operations

Formas is tasked with funding research and innovation that can contribute to sustainable development. In addition to funding research-performing organisations, we can also fund other public or private players such as other government agencies, municipalities or companies. The research and innovation funded must be of the highest scientific quality and relevance to society. Formas has substantial global operations, and participates and runs financing activities together with other countries. We are also tasked with systematically evaluating, analysing and compiling results from published research to support efforts to achieve the national environmental objectives. Furthermore, we are responsible for ensuring that research and research results are communicated. Formas must also contribute to the real-world application of research and innovation that we fund. This is done largely through collaboration, a task that we naturally incorporate in our areas of operation and perform with a variety of partners. We also conduct ongoing analyses of research, follow-up and evaluation of initiatives, serve as experts on various issues, and take an active role in research policy.

Starting points for Formas' gender mainstreaming efforts

This section presents several starting points for how Formas can help achieve an equitable society through its gender mainstreaming mandate, especially with regard to the government's emphasis on how government agencies should achieve impact throughout society.

Formas' vision is for knowledge to build a sustainable world, and it is in our role as a knowledge organisation that our operations should mainly be understood. In recent years, Formas' role as a conveyor of knowledge for sustainable development has grown in importance as our mandate has broadened and evolved. The knowledge we convey rests on dialogue and collaboration with various stakeholders in order to secure the real-world impact of research results and innovations in the best way possible. The government's emphasis on gender mainstreaming in collaboration with others to achieve broad societal impact is thus well aligned with our operations.

It is also aligned with a greater focus around the world on global challenges and on the relevance and benefits of research and innovation, including through the EU's Horizon Europe framework programme.

The open science movement, which Formas takes an active role in, is crucial for ensuring that research results reach out to citizens and researchers alike. This is why the results of all research we fund must be published immediately under open access and data management plans must be established. Access to results from publicly funded research is a crucial factor for achieving both gender equality and broader equity, since it opens up the democratic process by enabling more groups to gain insight into the research and innovation produced. Open science can also bring about an opportunity for co-creation, collaboration and citizen participation in research and innovation processes.

Because of the transition to an open science approach, the assessment and evaluation of research and researchers must be developed and improved to reflect and leverage, in a responsible way, all types of grants and results related to research and innovation. This requires that assessments be inclusive and take into account the different research realities within the research community.

Agenda 2030 is a central starting point for our entire operations. An explicit premise of the agenda is a methodical integration of gender perspective in the agenda's implementation, as well as a fundamental principle that no one should be left behind. There is thus great potential to harness the synergies that can be created by combining Agenda 2030 efforts with our gender mainstreaming mandate. In order to achieve these effects, Formas applies a gender perspective that, in addition to sex and gender, takes into account other associated power structures or cultural notions around age, class or ethnicity.

Our sustainable development work in itself includes potential synergies as well as conflicts among the different dimensions of sustainability (environmental, social and economic). Although Agenda 2030 must be understood in its entirety, implementing it means that synergies and contradictions among the 17 goals (and targets) must be highlighted, with special consideration to how the interests of certain groups are either represented or deprioritised during implementation.

In addition to other programme initiatives, Formas is responsible for four ten-year national research programmes, each with its own agenda and goals and each contributing to gender equality. One of the main purposes of these programmes is to improve the ability of research to meet society's challenges. Activities in the programmes and calls for proposals, such as seminars, conferences and the like, often take place in collaboration with various stakeholders. The national research programmes and their related activities are therefore essential in our efforts to meet priority challenges, which include gender equality efforts.

Finally, one of Formas' tools for benefitting society is our mandate to carry out systematic research reviews as an aid in achieving the environmental objectives and goals. These reviews consist of analyses of the state of knowledge in priority areas, and they aim to promote science-based policy decisions. They also focus on presenting and communicating results to different beneficiaries, such as municipalities, county administrative boards and relevant public authorities.

The way we conduct and communicate about research reviews is constantly evolving in terms of methodology and the areas to prioritise. Formas needs to address in particular its decision-making input and proposed decisions that might have different consequences for different groups of people.

All in all, Formas finds itself in a position that has created several favourable windows of opportunity. By leveraging potential synergies with other mandates and engagements and through collaborative partnerships, we are therefore well placed to achieve progress on gender equality throughout society.

General inequality problems and Formas' gender equality efforts

Two challenges

Sweden faces two main challenges in terms of gender balance within research and innovation. For one, recruitment up to the highest levels of the research and innovation system is still significantly male-dominated and the pace of gender balancing generally sluggish. The second challenge is that research topics and specialisations are mostly divided along gender lines and reflect gender-based educational and career choices.

One reason for the slow progress of women as professors involves their possibility to gain academic merit. A recent study commissioned by the Swedish Research Council on women and men's prerequisites for conducting research in higher education institutions² found that women experienced a lack of mentors and struggled to combine having a career with parenting to a greater extent than men. Women also find it more difficult than men to find the time to do research and distinguish themselves academically, and to a greater extent than men they report experiences of not being invited to events, seen, heard, read or referenced.

In addition, women's inadequate opportunities to set aside time to work on their research and become a professor are linked to the differences in women's and men's chosen fields of research, where the conditions for having time to do research differ. A higher percentage of women than men are active in fields of research and job categories that have a higher proportion of teaching and a lower proportion of research. The Swedish Research Council's study thus confirms previous hypotheses, which claim that traditionally male domains like science and engineering have more resources for research, while fields with predominantly female researchers, such as the educational sciences, are allocated fewer resources.

Insecure working conditions

Women also report insecure working conditions and a high level of work-related stress in academia, factors that affect their ability to conduct research. A survey commissioned by the Swedish Association of University Teachers and Researchers (SULF) among its members³

² Hur jämställt är det i högskolan? Kvinnor och mäns förutsättningar att bedriva forskning. Swedish Research Council, 2021.

³ I skuggan av osäkerheten: Om externfinansiering, osäkra anställningar och arbetsmiljön i akademien. SULF, 2021.

reveals a work scenario driven by the hunt for external funding to secure one's employment and the opportunity to conduct research and gain academic merit⁴. In the study, women also consistently report a worse work environment than their male counterparts and experience more stress and lower job satisfaction than the men. As for people born outside Sweden, they report a worse sense of belonging and recognition of their efforts yet fewer demands and less stress than people born in Sweden. People born outside Europe report less empowerment than people born in Sweden and in Europe.

The situation also varies depending on the field of research. For example, agricultural and veterinary medicine reports the highest demands but high empowerment. Humanities reports the lowest demands but the lowest empowerment and the highest stress, while natural sciences reports the highest empowerment and lowest stress, along with medical and health sciences.

Formas' gender equality efforts

Formas and other research funders are a part of the research and innovation system that creates the conditions for conducting research of high quality. Opportunities for distinction within the current system mainly rely on access to external funding in order to free up time for research and thus publication. But merit can also involve being offered various forms of assignments. These include becoming a member of a review panel or achieving influence by being sought out as an expert in other contexts, such as speaking at conferences and meetings, performing evaluations, or participating in research reviews and reports.

When it comes to Formas' operations specifically dedicated to research and innovation funding, we work actively to ensure that our review panel members are evenly distributed in terms of gender. The distribution over a one-year period of women and men reaches a balance within the 40-60 % span.

This balance of 40/60 is the Swedish government's criteria for equality.

In certain technical or engineering specialisations, the opportunities to recruit women can be more difficult since fewer women overall are active in these areas. The reverse applies to the possibilities of recruiting men in areas mainly dominated by women, as in veterinary medicine.

Over the years we have also noted a tendency for women, to a greater extent than men, to decline becoming a review panel member. One reason might lie in the relative lack of women in certain fields of research mentioned above, prompting a greater demand for them. Since the assessment of research applications and articles is an international activity, it is conceivable that the pressure will thus also be greater on the women who study certain research topics. The causes can be many and complex, however, and we intend to better investigate them so that we can gain an understanding of what we can possibly change to counteract this trend.

Still, an even gender distribution on the review panel does not mean that the assessments will be gender-equal by default. Both women and men have preconceived notions associated with gender and other forms of categorisation. This is why, through the instructions we provide and the member training we conduct, we are working to eliminate any conscious or unconscious bias with regard to applicants.

⁴ The situation is also confirmed in other parts of the world in an OECD report, Reducing the Precarity of Academic Research Careers. OECD Science, Technology and Industry Policy Papers, May 2021, no. 113.

Sex-disaggregated statistics

We regularly monitor and report sex-disaggregated statistics on the distribution of funds in our calls⁵. In total for the period 2016–2020, the distribution of awarded funds per main applicant based on gender was within the range of 40–60 percent, but overall men choose to apply to Formas’ calls more than women do. This distribution varies over the years but also depends on the type of call. For Formas’ research-initiated funding call, the annual open call, we can conclude that of the total number of applications received for the period 2016–2020, 41 percent were received from women and 59 percent from men. The grant award rate for the call was 43 percent for women and 57 percent for men. Instead, if we look at the national thematic calls, the distribution is more even in terms of applications received and granted: 51 percent for women and 49 percent for men. The reasons for these differences among call types (and in different call areas) require an in-depth as well as a qualitative analysis. But there is a tendency for thematically oriented calls in Formas’ areas of responsibility to be more even from a gender perspective. An in-depth analysis is necessary, however, and should be supplemented by an analysis of the percentage of co-applicants per sex and the percentage of funds per sex in total (main applicant and co-applicant), as well as with a more detailed gender equality analysis of the organisations and individuals that Formas funds.

Gender and research disciplines

As regards awarded applications for different research subject areas by sex, the proportion of these applications for each discipline has in recent years been relatively evenly distributed between women and men as the main applicant, but it varies in term of specific discipline. For both women and men, natural sciences ranks first followed by social sciences. In third place for women is agricultural sciences, while engineering sciences holds that place for men. For both women and men, the humanities is the area with the lowest applications awarded.

If we compare the results above with the distribution by discipline and sex for applications received and processed, the picture looks a bit different. The majority of applications received from both women and men here also fall under natural sciences. Whereas fields within the social sciences rank second for women, the number two spot for men is engineering and technology, followed by social sciences. For both women and men, the humanities represents the smallest applicant pool.

Here, too, additional analyses are needed to better understand the differences and more deeply qualify which disciplines and research fields women and men seek funding for and are awarded funding. The research disciplines reported are rough categorisations and do not reflect the wide range of topics, methods and research or innovation fields included in the categorisations.

⁵ Sex-disaggregated statistics on the allocation of funds are reported annually in Formas’ annual report, based on the main applicant. As regards international thematic calls, the statistics are not entirely complete due to Sweden’s confidentiality regulations. For these calls, only sex-disaggregated statistics for awarded projects are reported annually.

⁶ The summary is taken from Formas’ report on the percentage of applications received and awarded per research topic, broken down by sex for the years 2010–2019 and submitted by Sweden to the European Commission’s recurring report “She Figures” on gender equality in research and innovation in the EU.

Roadmap for gender mainstreaming efforts during 2022–2025

This section presents Formas’ three overarching goals and the strategic direction of gender mainstreaming efforts for the programme period. Formas’ overarching goals are primarily linked to two of the government’s gender-equality policy objectives: an even distribution of power and influence, and economic equality. For the programme period, Formas has chosen to focus on both developing decision-making input for the areas and processes prioritised in our development efforts and on the need for increased collaboration for achieving the agency’s overarching goals for gender mainstreaming.

Formas’ three overarching goals are:

- Provide knowledge that highlights the conditions and circumstances of different groups in society.
- Ensure that researchers and collaborators have equal opportunities to access Formas’ funding and other activities.
- Promote an equitable research and innovation system through collaboration.

About Formas’ goals for gender mainstreaming and the direction of our efforts

Formas’ overarching goals highlight different levels of our organisation where we believe progress must be made in order to better achieve the gender-equality policy objectives and, eventually, gender equality in society. This relates to the content itself and relevance of the research and innovation funded and communicated. It also involves ensuring an equal distribution of funds and participation in activities, as well as the need to collaborate with others around gender equality. The goals also relate to the three impact goals Formas has developed for its operations and are described under each goal.

For the programme period, Formas has chosen to focus on both developing decision-making input for the areas and processes prioritised in our development efforts and on the need for increased collaboration for achieving the agency’s overarching goals for gender mainstreaming. In order to better identify and formulate the problems around inequality and identify relevant measures within the framework of the goals, analyses must be carried out and decision support produced. We will accomplish this with the aid of an action plan we intend to develop and implement in the departments that are responsible for each work process.

All three goals are crucial to our operations and for the gender-equality policy objectives we want to help achieve: an even distribution of power and influence, and economic equality. In light of Formas’ growing role in recent years as a conveyor of knowledge for sustainable development, we wish to emphasise the importance of our work on the first goal (the need for inclusive knowledge and knowledge transfer) during the programme period 2022–2025. This is also in line with the fundamental principle of Agenda 2030 stating that no one should be left behind. In specific terms, this means drawing attention to the conditions and circumstances of different social groups within the framework of our sustainable development efforts and in the agenda’s implementation.

Goal 1: Provide knowledge that highlights the conditions and circumstances of different groups in society.

Research generates knowledge that improves our understanding of ourselves and the world around us and that can form the foundation for progress throughout society. Innovation processes need to build on a rich diversity of ideas and perspectives for addressing different needs and challenges. This is why it is vital for research and innovation to invite broader participation from different areas of society and help ensure that knowledge benefits all people, regardless of gender, age, class or ethnic background.

Goal 1 aims to ensure that the knowledge generated and conveyed is inclusive and reflects the conditions and needs of different groups in society in a relevant way, in order to make a long-term contribution to gender equality and sustainable development.

The goal relates to the following impact target for Formas' operations: Knowledge and collaboration that contribute to solving global and national challenges in society.

Focus of Goal 1 efforts

Sex and gender perspectives

An indicator that research and research results have the potential to include and reflect a diversity of groups in society is the extent to which the research integrates sex and gender perspectives, or is capable of highlighting other, often related, power structures as well. In essence, this is not about promoting sex or gender research per se, but rather involves an understanding of the possibilities for achieving equitable, equal relationships that such perspectives can bring about in the long run.

Formas intends to intensify its efforts to integrate a sex and gender perspective in its research and innovation activities, whenever applicable. This means, for example, that applicants may need to make an assessment of whether their proposed project takes into account the conditions and circumstances of different groups and, if so, which groups can benefit from or use the research in the long term. At the same time, we see a need to identify fields that require more knowledge about the importance of sex and gender perspectives, for example through different research reviews.

A diversity of research perspectives and stakeholders

Research and knowledge about sustainable development, in particular the environment and climate, have traditionally been mainly associated with a scientific research paradigm, while innovation has been largely equated to technological development. We would like to stress that a diversity of perspectives and research fields strengthens the quality of research. The relevance of research and society's capacity for innovation are crucial to achieving sustainable development.

In fact, they also promote gender equality since women and men tend to work in different disciplines, fields of research, industries and sectors. We therefore intend to continue our efforts to include and highlight a diversity of research and knowledge perspectives from different disciplines and research fields, and collaborations among them, across the entire breadth of our operations. This also includes a diversity of relevant societal stakeholders (organisations, companies,

industries and sectors) and promoting a pluralistic view of what research results and innovation can be.

Accessible knowledge

The research produced using funding from Formas must be made openly accessible if it is to make real-world impact and reach different groups of people. We require researchers to publish their results immediately using open access and make them searchable. But we also work to make research available in other ways, like by initiating collaboration between researchers and stakeholders, arranging seminars and conferences, and communicating results from research reviews.

Because of our ongoing digital evolution, Formas can improve the availability and impact of the knowledge generated in the long term through tools like our website. Our online magazine, Extrakt, popularises research and innovation that can help solve global challenges. Additionally, to bring to light the vital results emerging from the research we fund and to enhance their accessibility, we are investigating the possibility to produce a “Results in Brief” in some of the research fields. Summarising and conveying research and new knowledge in a simple, easy-to-understand way facilitates the understanding and impact of research and innovation throughout society.

Broader participation

Society faces a host of problems linked to sustainable development that need to be solved. But different kinds of experiences, knowledge and suggestions for solutions are also at hand. To better leverage the experiences and knowledge of diverse groups of people, we wish to broaden participation in the research and innovation processes. We will therefore investigate how we can stimulate opportunities for citizen co-creation and participation in research and innovation processes, as well as how we can involve different social groups or user groups in designing different initiatives, activities and interactions.

Goal 2: Ensure that researchers and collaborators have equal opportunities to access Formas’ funding and other activities

Formas’ starting point is that research and innovation must be conducted by people who hold the best qualifications. No other circumstances should influence an assessment of the capacity to perform the project presented in an application or participate in activities that we organise.

This goal aims to ensure a gender-balanced distribution of Formas’ funds. It addresses the granting process as well as the percentage of female and male researchers and collaborators who are granted funding from us and to what extent. It also addresses the need to ensure equal participation in other activities and tasks that we carry out, such as evaluations, communication efforts, conferences, reports and systematic research reviews.

The goal relates to the following impact target for Formas’ operations: Legitimate, transparent and effective processes that ensure high scientific quality, relevance and gender equality.

Focus of Goal 2 efforts

Principles for funding activities

Formas designs its assessment and selection processes for the call based on several basic principles, including ensuring that the funding promotes gender equality, equity and diversity. For certain funding calls, we collaborate with other funding organisations both in Sweden and abroad, in which case the processes of conducting the call, assessment and selection can be managed by one of our partners. During such collaboration, Formas is required to be involved in the call's design and in the assessment and selection process in consultation with the other funders. Funding activities and their processes are continuously monitored for compliance with the principles.

Responsible assessment and evaluation

Through our commitment to open science and open access to publications and research data, Formas has also joined the global movement for the responsible assessment and evaluation of research and researchers. As a fundamental principle for such an assessment or evaluation, the assessment system must be adapted and improved in order to be inclusive and promote gender equality in the research community. Part of such efforts involves reviewing and improving the assessment criteria and instructions to the applicant and reviewers whom Formas engages in its various initiatives. Another step entails reviewing how forms and other information pertaining to researcher merits can be designed and adapted to better convey and reflect all forms of contributions and results involving research and innovation, rather than having a one-sided focus on the number of publications. The evaluations carried out by Formas must also be informed by a responsible approach and improve the visibility of a wide range of contributions.

Developing our system for data collection and statistics

A prerequisite for ensuring that research and innovation funds are distributed in an equal way is access to reliable, comprehensive statistics. The data extraction system Formas has traditionally used has several weaknesses and is not as user-friendly as it could be. So together with two research councils, the Swedish Research Council and Forte, Formas is developing a new system for data storage. This system will make it easier and more efficient to access a wide range of data on the distribution of funds, disaggregated by sex. A related visualisation tool will make it easier to illustrate the allocation of funds while providing better opportunities for a later qualitative analyses and suggestions for possible corrective measures.

Gender budgeting

Gender budgeting is an overarching concept for securing a budget that is gender-balanced and an equal distribution of resources among women and men. This can entail actions like considering gender equality analyses for various proposed initiatives or activities, so that budgetary choices, priorities and resource allocations reflect gender equality goals as far as possible.

To further ensure that the implications for gender equality are taken into account, we intend to develop analyses that determine how Formas' grant budget is distributed with respect to gender. One area significantly impacted by this concerns which research disciplines or research and innovation fields are allocated the most and the least resources compared to the portfolio as a whole.

Given that research disciplines and specialisations are largely divided along gender lines and reflect gender-based educational and career choices, such a portfolio analysis can highlight how the content of different initiatives affects the possibility to equally distribute resources. This also includes an analysis of the stakeholders from different organisations, industries and companies that Formas can finance in relation to gender and share of budgeted funds.

Gender-balanced participation in international calls

A key consideration for gaining academic merit as a researcher is to obtain research funding in international calls. We intend to engage more stakeholders and to champion equitable participation in our international calls as a whole and in particular within the framework of Horizon Europe, the EU's latest framework programme for research and innovation. The framework programme brings a strong focus to Formas' areas of responsibility, with one of its overarching themes being gender equality. Several partnerships are being launched in the programme, and within Formas' priority partnerships we are taking action on gender equality both in how we design our calls for research funding and how we design the partnerships themselves.

To gain a better understanding of the possible obstacles to achieving gender-balanced participation, we need to analyse previous international calls in both the previous framework programmes and in previous calls under various partnership programmes. In addition, we need to ensure that the initiatives taking place within our national research programmes are linked to the calls and activities taking place in Horizon Europe. In this work, we also see a need to review and harmonise the requirements set out in the national calls in relation to the international calls. For example, Horizon Europe is introducing requirements for mandatory gender equality plans for projects and programmes; Formas also needs to review that possibility.

Gender-balanced participation in various activities and assignments

Opportunities for career progression, or other types of status and influence, are not achieved solely by being awarded research or innovation funding. Equally important are the opportunities to participate in other activities, such as speaking at conferences or participating in seminars. The same applies to the possibilities of obtaining different assignments, such as serving on expert panels, participating in reports and research reviews, or in other contexts that communicate research and innovation.

Formas takes action to ensure that participant representation in various activities is equal among women and men, and has guidelines in place for gender-balanced participation. It is also vital for the representation of participants in such activities to highlight as great a diversity as possible, and thus help to break norms and challenge established notions of who a researcher is and what they are like. This can be done by including representatives of different genders, ages, ethnicities, skin colours or functional variations. This also applies to participating stakeholders from different organisations, companies or industries in society.

Goal 3: Promote an equitable research and innovation system through collaboration.

Formas collaborates extensively at different levels with a variety of stakeholders on a range of aspects related to research policy and on sustainable development. Collaboration is key to our ability to help achieve the gender-equality policy objectives in the long term and to achieve impact throughout society. This is especially true considering that we as an individual government agency have a limited scope of action and influence.

This goal touches upon structural conditions in research and innovation, for example in terms of career progression and development, and how both Formas' operations and our opportunities for collaboration can make these conditions more equal.

The goal relates to the following impact target for Formas' operations: A well-functioning research and innovation system in which society has a high level of trust.

Focus of Goal 3 efforts

An improved merit system

High on the domestic and global research policy agendas is the question of how to improve the merit system for researchers in order to promote an open, equitable and fair science system. The current career progression structure in research and innovation primarily rewards researchers who publish the most in scholarly journals. This system mostly benefits those who have the time to practice their research and to write articles, which is truer for men than women. The merit system's preoccupation with publishing also risks creating what has been called a "publish or perish" culture, in which work on research is measured and valued according to the number of publications and the status of the journals they are published in rather than by the content (given differences in publishing tradition across different scientific disciplines).

This one-sided emphasis on publishing articles often means an undervaluation of other merits, such as teaching, collaboration, open science practices, popular science or other forms of dissemination besides pure traditional bibliometrics⁷. We have identified a need to review how to improve the assessment of research applications and other evaluations in order to better leverage different kinds of merit (see above under Goal 2, "Responsible assessment and evaluation"). However, like other individual organisations, we have little opportunity to create incentives to fundamentally change the merit system. In order to achieve consensus and, in the long term, change, we actively participate in a variety of contexts and collaborations where the issue is discussed and solutions tested. For example, we are involved in Science Europe and the Global Research Council as well as cOAlition S, an international consortium of research funders driving the transition to an open science system. We also participate in AcademiaNet, a European network and database for promoting career progression opportunities for female researchers and experts across all disciplines.

⁷ This situation, and in particular the consequences of the current system on men's and women's opportunities for career progression at higher education institutions, has also attracted the attention of the Swedish government in its latest research bill. The Swedish Higher Education Authority (UKÄ) has been tasked with surveying the situation at higher education institutions.

On the national stage, opportunities for collaboration include participation in dialogues with SUHF (the Association of Swedish Higher Education Institutions) and in the funder networks for open science and for gender equality, which bring together funders from the public and private spheres in addition to other stakeholders. A representative from the National Library of Sweden also takes part in the open science network. The gender equality network has representatives from the Swedish Gender Equality Agency and the Swedish Secretariat for Gender Research.

Pilot project with research-performing organisations

Formas offers a variety of grant types for different purposes that are determined by the requirements and criteria set out in our calls. They cover a spectrum ranging from research-initiated calls to more specifically targeted calls, and can be used for both national and international initiatives. Funding can be used for various forms of collaboration between researchers and stakeholders, for enabling research and innovations with real-world impact, or for promoting career development through earmarked grants for early-career researchers, for example.

The requirements and criteria are used to direct the funds towards what we want to achieve, but we need to better understand how these requirements and criteria are perceived or affect the research-performing organisations (RPOs). This is particularly true of the consequences of achieving gender equality and gender-equality policy objectives. We therefore intend to investigate the possibility of launching a pilot project with a RPO on the impact our grant types, requirements and criteria at a higher education institution, research institute or other funding administrators. The exact formats for this will be developed during the programme period.

International funder collaboration

Formas actively participates at various levels in several international collaborations with other funders and stakeholders, such as the Global Research Council and Science Europe, and is involved in different partnerships and programmes including the Belmont Forum and others within Horizon Europe. This involvement gives us a great opportunity to follow the global debate and developments around gender equality in the research and innovation system. It offers us the potential to pursue equity and gender equality issues within the framework of these collaborations and partnerships – and to actively support and participate in various initiatives and programmes that focus on gender and gender equality. However, Formas does not currently participate in any such programmes. We have started discussions and will investigate how Formas can get involved in both a Nordic and a European research programme on gender and gender equality.

Through the EU coordination function, Formas also provides input for the design of the new European Research Area (ERA), which highlights gender equality throughout.

Collaboration with other agencies and organisations

In addition to our collaborations and partnerships with various funders both within and outside Sweden, we wish to highlight collaboration with other government agencies and organisations including the private sector. We see the need to further develop this collaboration within the framework of our gender mainstreaming mission. Such collaboration already takes place to a great extent within the framework of our work on the national research programmes.

We have good reason to discover which other agencies and organisations we can collaborate more closely with around sustainable development and our areas of responsibility, such as the environment. This is especially relevant for the agencies that also have a gender mainstreaming mandate during the government's new programme period, such as the Swedish Environmental Protection Agency.

Planning, implementation and follow-up of Formas' gender mainstreaming

Our government mandate is to integrate gender equality efforts in Formas' regular operations. All parts of the organisation must contribute to gender mainstreaming. For Formas, the most strategic step will be to integrate the implementation of this mandate in our business planning. This is also what the Swedish Gender Equality Agency recommends, in addition to providing a clear statement about gender mainstreaming in our operational planning instructions. The gender equality agency also stresses the importance of developing and using gender budgeting as a tool in gender mainstreaming.

Formas' strategy for gender mainstreaming will be complemented by an action plan that formulates specific goals in the areas Formas has prioritised in the strategy. The action plan for gender mainstreaming will be an integral part of Formas' operational planning and will be followed up and updated annually. At the end of the programme period, Formas will evaluate our success in completing this mission with the aim of carrying through the lessons learned as we continue our gender mainstreaming efforts and fulfil similar government mandates in the future.

FORMAS

Formas is a government research council for sustainable development. We fund research and innovation, develop strategies, and conduct analyses and evaluations. Our areas of activity are the environment, agricultural sciences and spatial planning. We conduct systematic reviews that aim to make it easier for Sweden to achieve our environmental goals. We also communicate about research and research results.

Forskningsrådet för miljö, areella näringar och samhällsbyggande, Formas
The Swedish Research Council for Environment, Agricultural Sciences and Spatial
Planning

Box 1206, 111 82 Stockholm, Drottninggatan 89

Phone: +46 (0)8 775 40 00, E-mail: registrator@formas.se, www.formas.se