IIASA Gender Equality Report 2023

Advancing gender equality –
A roadmap for progress

International Institute for Applied Systems Analysis
IIASA www.iiasa.ac.at

The International Institute for Applied Systems Analysis (IIASA) is an independent, international research institute with National and Regional Member Organizations in Africa, the Americas, Asia, and Europe. Through its research programs and initiatives, the institute conducts policy-oriented research into issues that are too large or complex to be solved by a single country or academic discipline. This includes pressing concerns that affect the future of all of humanity, such as climate change, energy security, population aging, and sustainable development. The results of IIASA research and the expertise of its researchers are made available to policymakers in countries around the world to help them produce effective, science-based policies that will enable them to face these challenges.

International Institute for Applied Systems Analysis
Schlossplatz 1, A-2361 Laxenburg, Austria

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Contact: hr.staff@iiasa.ac.at

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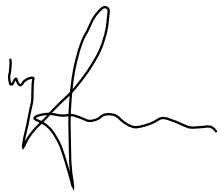
Foreword by the IIASA Director General

The fair and equal treatment of all individuals without any form of discrimination based on factors such as race, gender, sexual orientation, disability, religion, or any other identifying characteristic, is a fundamental human right. It is imperative to ensure safety for everyone and provide equitable opportunities, which is central to achieving the Sustainable Development Goals. Although the moral obligation to bring about this change is essential, promoting gender equality also generates benefits such as increased efficiency, innovation, value creation, and profits. However, biases and obstacles to gender equality and diversity are still prevalent, necessitating determined and sustainable action from both public and private institutions.

It is with both pride and a renewed sense of urgency that I present this report on gender equality at IIASA. While we have made significant strides toward a more equitable future, the data presented here underscores the continued need for dedicated action. This report shines a light on the progress achieved and the challenges that remain. It reflects the voices of many scholars and professionals affiliated with IIASA who have dedicated their expertise and skills. It forms the foundation for a roadmap towards a more just and equal working environment at IIASA. It compels us to examine existing structures, identify and dismantle barriers, and champion policies and practices that empower women. This report serves as a valuable tool for IIASA Member Organizations, policymakers, civil society organizations, businesses, and individuals alike. It provides a shared understanding of our mission, identifies areas for improvement, and proposes concrete recommendations for action.

I urge everyone to read this report carefully, reflect on its findings, and commit to playing their part in building a more equitable future. We must contribute to a world where every individual, regardless of gender, has the opportunity to reach their full potential.



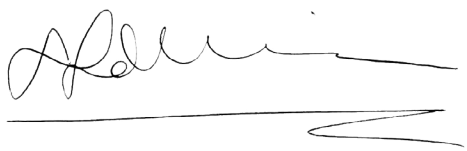
Hans Joachim Schellnhuber
Director General

Acknowledgments

Despite numerous efforts, progress towards achieving gender equality in the field of science has been slow. One notable example occurred in 1924 when Norman R. Campbell, a renowned physicist, wrote a letter to the editor of *Nature* requesting that the term "man of science" be replaced with something more inclusive, such as "scientist". Unfortunately, it took more than seven decades for this request to be fulfilled, as *Nature* only adopted a new mission statement in 2000 that eliminated the reference to "men of science." Despite this progress, it took another two decades for *Nature* to appoint its first female editor-in-chief, Magdalena Skipper, in 2018. Skipper is a geneticist, and her appointment was a significant milestone for the scientific community. Her achievement is a reminder of the need to continue promoting gender equality in science and ensuring that everyone, regardless of their gender, has an equal opportunity to succeed in their chosen field.

It is heartening to see that IIASA recognizes the importance of promoting gender equality and has taken meaningful steps towards this goal. In 2019, the IIASA Council approved the position of Deputy Director General for Science, and a woman scientist, Leena Srivastava, was appointed. The Gender Equality Plan, the establishment of the Forum for Gender Equality and Inclusion, and my appointment as the Gender Equality Officer in 2023 are all significant milestones in this journey. While preparing this report, I was conscious that evidence-gathering would be at its heart. There were times when I was fretting about the lack of support on data collection concerning women's work and status at IIASA. Thankfully, a fair number do exist, supported by an abundance of evidence on the use of women's resources that I drew on. I want to particularly thank colleagues from the IIASA Human Resources, Library and Knowledge Resources, Process and Quality Assurance, and Administrative Management Application departments for pointing at sources and assisting in data collection. A heartfelt thank you to Jesus Crespo Cuaresma for providing the gender pay gap analysis. I am grateful to my colleagues at the Communication and External Relations Department for editing and designing the report. Most importantly, I am thankful for all the feedback from the IIASA Forum on Gender Equality and Inclusion and the support from the IIASA Executive Team in finalizing this report.

Gender equality is an ongoing struggle that requires sustained efforts across multiple areas. It is uplifting to see that IIASA is committed to creating a safe, inclusive, and supportive environment for everyone. I am confident that together, we can create a more equitable and inclusive environment at IIASA and beyond.



Anastasia Aldelina Lijadi
IIASA Gender Equality Officer

Introduction

The International Institute for Applied Systems Analysis (IIASA) is a multilateral research entity that advances systems analysis and conducts policy-oriented research into issues that are too large or complex to be solved by a single country or academic discipline. Founded to promote East-West scientific cooperation during the Cold War, IIASA today addresses the global challenges of the 21st century. This includes pressing concerns that affect the future of all of humanity, such as climate change, energy security, population aging, and sustainable development.

Contributing to over five decades of work on pressing global issues with 20 member organizations in Africa, the Americas, Asia, and Europe, IIASA has been serving as a neutral meeting place for scientists and policymakers from different political systems, ideologies, cultures, and disciplines. Based on its international credibility, neutrality, and the application of an integrated systems approach, IIASA offers unique assistance in building bridges between countries and stakeholders in the pursuit of sustainable development and in informing international negotiations on global change.

IIASA is committed to promoting equity, diversity, and inclusion throughout its workforce and operations. The Institute has 375 staff members from more than 50 countries. In 2023, IIASA launched a Gender Equality Plan and appointed a Gender Equality Officer to further these efforts. Additionally, the institution has set up a Forum for Gender Equality and Inclusion, which includes representatives from both the scientific and operational staff. This forum serves as a platform for consultation, dialogue, learning, and advocacy on gender and inclusion issues. It aims to drive positive change within the Institute and beyond.

All members of the staff at IIASA are required to actively contribute towards upholding social equity as a core value of the Institute. This involves the provision of fairness and justice by fostering a supportive work environment that encourages open dialogue and promotes gender equality and inclusivity. To achieve this, staff members are expected to familiarize themselves with the content and objectives of the IIASA Gender Equality Plan to gain a deeper understanding of gender-related issues and the importance of promoting equality. They should also participate in training and initiatives related to gender equality. An online Gender Equality Awareness Training platform will be launched in the second quarter of 2024.

This is the first Gender Equality Report from IIASA, developed under the IIASA Strategy 2021-2030. The report is divided into five sections: gender balance in leadership and decision making, gender equality in recruitment and career progression, work-life balance and organizational culture, integration of the gender dimension into research, and measures against gender-based violence. Every section is tailored to meet the gender equality indicators outlined in the IIASA Gender Equality Plan. This ensures that we are doing our part to promote fairness and inclusivity in everything we do.

1. Gender balance in leadership and decision making

1.1 Gender representation at management level

"When a talented woman is led away from science, humanity loses half of its talent and much more of its sensitivity and intuition."
– Mexican biologist Esther Orozco, L'Oreal/UNESCO Laureate 2006 for Latin America and the Caribbean

Since the implementation of the IIASA Strategy 2021-2030, IIASA has reconfigured its broad overall research programs into six major research programs. The programs on Advancing Systems Analysis (ASA), Biodiversity and Natural Resources (BNR), Energy, Climate, and Environment (ECE), and Population and Just Societies (POPJUS) all build on important research traditions at IIASA. Aligned with the IIASA Research Plan 2021-2024, each program has established four research groups that can be more agile and responsive to emerging research needs within the broader program context. The program on Economic Frontiers is a new addition, while the Strategic Initiatives Program, a further innovation, is responsive to bottom-up proposals by IIASA staff and our Member Organizations for prioritizing cross-cutting studies of high policy relevance.

Program Director and Research Group Leader appointments have five- and four-year terms respectively, with the possibility of a one-time reappointment, to allow opportunities for other colleagues to serve in a management position. On the professional and operational sides, IIASA appointed three executives, including two women as Deputy Director General and Chief Operations Officer, and five men and two women to head various departments and units. Four men and two women currently hold positions as Program Directors, and 12 men and four women are fulfilling the role of Research Group Leader (IIASA has one man and one woman with dual functions as Program Director and Research Group Leader). Women are underrepresented in key positions at IIASA, with 74% of the key positions held by men.

Table 1: Leadership positions by gender

Title	Men	Women	Total
Executive Committee (DG, Deputy DG, COO)	2	1	3
Program Director	4*	2*	6
Research Group Leader	12	3	15
Head of Department	4	1	5
Head of Unit		1	1
Dean, Capacity Development & Academic Training	1		1
Total	23	8	31

** One man and one woman fulfill dual roles as both Program Director and Research Group Leader. Data as per 1 July 2024.*

Karen Lips has been appointed as IIASA Deputy Director General, as of 1 July 2024. She envisages fostering a research environment that champions diversity, equity and inclusion, and gender equality by promoting diverse perspectives, ensuring equitable opportunities, cultivating an inclusive culture, and addressing gender disparities to advance innovative and impactful scientific discovery at IIASA.

1.2 Gender representation across profiles and grades

In 2021, IIASA introduced a new process for the recognition of scientific employees under the IIASA Policy on Adapted Profiles of the European Framework for Research Careers based on the European Framework of Research Careers. The policy is used to evaluate the development of an individual researcher's demonstrated competencies, skills, capabilities, achievements, and contributions. The European Framework of Research Careers distinguishes and describes four broad profiles during a researcher's career development. The four profiles have been modified for use at IIASA and are called: Researcher (R1), Research Scholar (R2), Senior Research Scholar (R3), and Principal Research Scholar (R4). The Institute also recognizes employees working as software professionals in the following three categories: Research Software Developer (S1), Senior Research Software Developer (S2), and Research Software Engineer (S3). Currently, IIASA does not have employees at the S3 level.

In the last quarter of 2023, IIASA introduced a new grading system for its operational employees, from O1 to O7, under the Grades of Operational Positions Policy. This milestone was achieved through a collaborative effort, with valuable insights and inputs gathered from Q&A sessions and multiple meetings with heads of departments, units, and program directors. The new Grading Policy is a significant step forward, as it plays an important role in supporting various human resources processes within the Institute. It applies to all operational positions, encompassing positions within administrative departments and units, non-scientific positions within research groups and programs, and the Institute's non-executive Directorate staff.

Table 2: Gender representation of research profiles and operational employees

Profile/Grade	% Men (FTE)	% Women (FTE)
Research Assistant	31%	69%
Researcher (R1)	52%	48%
Research Scholar (R2)	64%	36%
Senior Research Scholar (R3)	90%	10%
Principle Research Scholar (R4)	74%	26%
Software Programmer & Developer (S1-S2)	85%	15%
Emeritus and Senior Advisor	85%	15%
Total Scientists	66%	34%
O1	8%	92%
O2	37%	63%
O3	12%	88%
O4	43%	57%
O5	41%	59%
O6	14%	86%
O7	80%	20%
Total Operational employees	33%	67%
Total all employees	56%	44%

Notes:
By the end of 2023, by headcount, IIASA had a total of 375 employees (excluding Executives), out of which 167 (44% by full time equivalent (FTE) from total employees) are women and 208 (56% by FTE from total employees) are men. By headcount, 265 employees were working as scientists and 110 employees work in operations. According to FTE data, 80% of men work as scientists and 20% in operations, while 51% of women work as scientists and 49% in operations.

Among scientific employees, there were 91 women (or 34% by FTE), which is equivalent to 51% of the total FTE of woman employees; and 174 men (or 66% by FTE). In total, 66% of scientific profiles are held by men. About 32% of men hold positions at R3, R4, Emeritus, and Senior Advisor levels. In all scientist profiles, there were more men than women scientists, except for in the Research Assistant position. Women were very much underrepresented in the Senior Research Scholar (R3) profile, with only 10% by FTE.

IIASA's operational staff consists of a total of 110 employees. Out of these, 69% are women. When compared to the scientific employees, it showed that there are more women in all grades except at the highest grade of O7. This shows that leadership positions within the operational position are still dominated by men.

Overall IIASA has fewer women than men in senior scientist roles as well as in operational leadership positions.

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The Equity and Justice Research Group, in collaboration with the IIASA Strategic Initiative projects fairSTREAM, JustTRans4ALL, and TRUST, hosted a Justice Framework Workshop on 16 November 2023 at IIASA (photo from the IIASA website)

1.3 Gender pay gap

The gender pay gap refers to the difference in average earnings between men and women expressed as a percentage, reflecting how much less women earn on average compared to men. Table 3 below shows the calculated unadjusted gender pay gap (the raw difference in average earnings between men and women for all employees counting years of service) and the adjusted gap (compares men and women with similar profiles and grade qualifications, seeking to isolate discrimination as a factor). A positive gap shows that men earn more than women, and a negative gap shows that women earn more than men, with caution that some results may not be statistically significant from zero. It is crucial to recognize the complex causes of the gender pay gap, which include systemic factors like occupational segregation, the undervaluation of traditionally female-dominated work, and a big disparity in the years of service.

Table 3: Gender pay gap at IIASA

Profile/Grade	Gender pay gap %
Research Assistant	-15,62*
Researcher (R1)	0,9
Research Scholar (R2)	3,99*
Senior Research Scholar (R3)	-2,74
Principle Research Scholar (R4)	7
Software Programmer and Developer (S1-S2)	-3,42
Operational - O1	-3,20
Operational - O2	8,51
Operational - O3	-4.76
Operational - O4	6,20

Profile/Grade	Gender pay gap %
Operational - O5	8,01
Operational - O6 & O7	12,25

Note:
FTE – Full-time equivalent

The gender pay gap is calculated based on (Average total remuneration for men - Average total remuneration for women) / (Average total remuneration for men x 100). The calculation includes all employees and employee types (part time or full time) except for IIASA Executives (DG, DDGS, and COO).

With respect to researcher profiles, there is a statistically significant gender pay gap for salaries at the Research Scholar (R2) level, where women earn on average 3,99% less than equally qualified men. The gender pay gap among other research profiles (R1, R3, and R4) is not statistically significant from zero when controlling for the years of service in the regression model.

For software programmers (S1) and software developers (S2), there is no statistically significant gender pay gap in salary, amounting to -3,42%.

Among operational employees, there is no statistically significant gender gap for the salary at level O1 to O6. However at level O7 there is a big gender gap in favor of women at -25,01%.

The total gender pay gap for scientific and operational employees is statistically significant and implies that on average at IIASA, women earn a salary that is 3,46% lower than that of men at the same grade. There are however major differences across grades in salary gaps, including grades where the gender pay gap is in favor of women (those are the negative values in the table above).*

** Regression analysis on the gender pay gap with the variable of years of service and gender showed that the gap was statistically significant due to gender differences, not because of years of service.*

** Executive positions are excluded.*

2. Gender equality in recruitment and career progression

2.1 Gender equality in recruitment

Employees are fundamental to the success of the Institute and in making IIASA a great place to work. IIASA's recruitment policy was designed to be transparent, efficient, supportive, and internationally comparable, tailored to the employment opportunities available at the Institute. The policy promotes the importance of inclusion, fairness, and effectiveness within the hiring process in line with the IIASA Core Values.

In 2023, IIASA had 61 job openings, including 27 operational positions, three opportunities for software professionals, and 31 researcher positions. From a total of 2,546 people who applied (59% men, 40% women, and 1% other gender), an equal share of men and women were appointed to fill the vacancies. However, this is not true for individual employment categories. For researchers, more men (18) than women (13) were hired, and for operational positions more women (16) than men were hired (11), see Table 4.

Table 4. Total vacancies filled in 2023

	Men	Women	Total
Application received	1492	1027	2546
Operational (hired)	11	16	27
Software professionals (hired)	2	1	3
Researchers (hired)	18	13	31
Total hired	31	30	61

2.2 Gender equality in career progression

IIASA implemented the framework developed by the European Commission in introducing four research profiles (Researcher, Research Scholar, Senior Research Scholar, and Principal Research Scholar). IIASA also introduced three software professional profiles (Software Programmer, Software Developer, and Software Engineer). The framework benefits researchers and software developers by making it clear what is expected throughout their careers and how to progress. This also helps the Institute to set priorities

for staff training and career progression, make international comparisons, and benchmark its researcher population with other organizations, as well as to help evaluate candidates during the recruitment process.

A researcher may apply to be recognized in a higher profile and will be evaluated by their peers (Scientific Recognition Committee) after completing two performance and development review cycles. Recognition is based on the quality of scientific work and research funding acquisition, as well as science management and supervision competencies at senior levels. Researchers are expected to keep several key issues at the forefront of their minds: their relationship with fellow scientists and colleagues, their presence and profile in the broader scientific community, and a strong commitment to upholding the reputation of IIASA. Researchers' development is expected to be active, supported by transparent recognition criteria and a well-defined evaluation process.

Since the profile recognition was introduced in 2021, IIASA has proudly recognized 54 (44 men and 10 women) colleagues through advancement to higher profiles. In 2023, the number of women being recognized to higher profiles increased significantly. A total of 26 scientists (including nine women) have been recognized for their scientific work at IIASA, consisting of five Research Scholars (including three women), 17 Senior Research Scholars (including five women), and three Principal Research Scholars (including one woman).

Table 5. Recognition of Researchers, Software Programmers, and Emeritus profile

Recognition of higher-level	2023	2022	2021
R2 – Research Scholar	5 (3 women)	1	1
R3 – Senior Research Scholar	17 (5 women)	6 (1 woman)	6
R4 – Principal Research Scholar	3 (1 woman)	2	
S2 –Software Developer	1		
Total	26 (9 women)	8 (1 woman)	7

IIASA – Senior Research Scholars

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2023 – Research Scholar

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2023 – Senior Research Scholar (photo by Lijadi)

Balancing a vibrant institute for young talent with mechanisms for retaining key expertise, even post-retirement, is crucial. IIASA Emeritus and Senior Advisor status honor distinguished researchers and provide a platform for continued contributions, mentoring, and network transfer. This not only recognizes senior scientists, but also supports the growth of young and mid-career scientists ensuring that IIASA remains at the forefront of scientific endeavors. Six researchers including one woman received the prestigious designation of IIASA Distinguished Emeritus Research Scholar. They are Günther Fischer, Arnulf Grübler, JoAnne Linnerooth-Bayer, Nebojsa Nakicenovic, Sergei Sherbov, and Anatoly Shvidenko.

Table 6. Honoring and maintaining connection with senior researchers (2021-2023)

Title	Men	Women
Senior Advisor to Program	2	
Emeritus Research Scholar	5	
Distinguished Emeritus Research Scholar	6	1
Total	13	1

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2023 – Distinguished Emeritus Research Scholar

3. Integration of the gender dimension into research

3.1 Gender representation in research projects

To foster excellence and ensure that research and innovation outputs benefit everyone in society and are adapted to people's needs and behaviors, several external funders impose the integration of a gender dimension in research projects. The gender dimension implies analyzing and taking into account the possible differences between men and women (biological characteristics as well as social and cultural features), in the research and innovation content of the project.

IIASA aims to improve gender balance in research project leadership, ensuring that more women serve as principal investigators or work package coordinators, and thus have a seat at the decision-making table. The principal investigator leads a research project and has full accountability for the overall performance of the project. The work package coordinator is responsible for a set of tasks relating to the project and reporting to the principal investigator. In 2023, apart from ongoing projects, 89 new externally funded projects plus 1 project under the Strategic Initiatives Program were added to the IIASA portfolio, amounting to 7,2M EUR of research funding. Around 25 women and 101 men are listed as having significant responsibility for leading these new projects.

The integration of the gender dimension into research addresses the incorporation of gender analysis through the entire research and innovation cycle. This includes setting research priorities by defining concepts, formulating research questions, developing methodologies, gathering and analyzing gender-disaggregated data, evaluating and reporting results, and transferring them to markets as innovations and products. Among the new projects in 2023, 10 projects (11,2%) include a gender dimension.

3.2 Gender representation in publications

Post COVID-19, IIASA was able to maintain its research outputs and their quality as reflected in high-impact journal publications. In 2023, there were **708** IIASA publications, of which 515 were peer-reviewed journal articles. These articles were written in collaboration with 159 institutions in 91 countries. About **325** publications, or less than half, included women as either first or coauthors. In 2023, 36% of the **329** first author IIASA publications were led by a woman as the first author (**119** publications), and 64% (**210** publications) were led by a man as the first author.

However, considering that IIASA has more men than women scientists, the women scientists at IIASA are leading in the ratio of publications as coauthors (2,82 compared to 2.38 for men), as well as the ratio of publications as first author (1,95 compared to 1,78 for men).

Table 7. Publications as coauthors and first authors by gender

Gender	Number of publications	Head count author	Ratio IIASA publication per head count
Men	571	240	2.38
Women	325	115	2.83

Gender	Number of publications	Head count IIASA first author	Ratio IIASA publication per head count as first author
Men	210	118	1.78
Women	119	61	1.95

Climate change and energy were among the topics that received the most media attention in 2023. IIASA researchers contributed to six out of the 25 most mentioned papers in online news articles, as well as on blogs and social media platforms based on an analysis performed by Carbon Brief using Altmetric data.[1] Among the six papers, one paper was written by a woman as first author (#8 Quantifying the human cost of global warming: Caroline Zimm) and two papers as coauthor (#9: Safe and just Earth system boundaries: Nebojsa Nakicenovic and Caroline Zimm; and #20: The 2023 report of the Lancet Countdown on health and climate change: Gregor Kiesewetter, Fabian Wagner, and Laura Warnecke).

3.3 The gender dimension in publications

Among 708 IIASA publications, there are 515 publications in journal articles, books, book chapters, and IIASA monographs, and 35 of these publications (or 6,8%) included a gender dimension in the title, abstract, or analysis, such as a breakdown of the samples into men and women.

[1] *#8:* Quantifying the human cost of global warming
#9: Safe and just Earth system boundaries
#11: Satellites reveal widespread decline in global lake water storage
#14: Assessing the size and uncertainty of remaining carbon budgets
#18: Indicators of Global Climate Change 2022: annual update of large-scale indicators of the state of the climate system and human influence
#20: The 2023 report of the Lancet Countdown on health and climate change

Table 8. Gender dimension explicitly considered in the publications

	2021	2022	2023
Number of IIASA publications that include a gender dimension*	39	43	35

** Data gathered from IIASA PURE using the following search words: adult(s), birth, child(hood), female, gender, generation, intergenerational, parent(al), maternal, mother, sex, and woman-women.*

A recent publication by Liu and Marois (2023) from the Population and Just Societies Program revealed how childbearing and rearing reduced women's participation in the labor force in China. A potential increase in fertility resulting from the end of the one-child policy could create a double burden for female workers in the short term, as higher fertility decreases women's workforce participation. The presence of young children at home might require more time and energy from the mother, which means a negative impact on their employment. This shrinks the pool of potential workers who will have to pay for both a higher number of children and a growing number of elderly people, thus exacerbating population aging challenges. This underlines the importance of reducing the barriers that prevent mothers from reconciling their family and professional life.

Another study from the Multidimensional Demographic Modeling Research Group examined the effectiveness of policy in improving mothers' educational attainment in reducing mortality rates in India (Moradhvaj & KC, 2023). Using data from five rounds of the National Family Health Survey (NFHS) conducted in India between 1992–93 and 2019–21, on under-five mortality rates in India, the study showed that mortality has declined sharply in rural and urban areas because of the increased educational attainment of mothers. The study also suggested that the decrease in mortality in rural areas may be attributed to the effort of the Government of India to improve the maternal and child healthcare status in rural India.

IIASA also applied interdisciplinary research to implement gender-transformative policies. Shonali Pachauri, Research Group Leader of the Transformative Institutional and Social Solutions Research Group coauthored a study that explored the role of gender in climate change mitigation by reviewing feminist epistemology studies. The research found that despite statistically significant correlations between gender equality indices and the Environmental Performance Index, the positive relationship between gender equality and environmental performance is contextual and multi-faceted. The study highlights the need for interdisciplinary research to implement gender-transformative policies.

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Marta Kozicka *is the leading author of Chapter 3 of the IIASA Flagship report – Food security, ecosystems, and climate change. She is also the leading author of "Feeding climate and biodiversity goals with novel plant-based meat and milk alternatives" published in Nature Communications, for which she was selected as the National Champion for Austria in the 2024 Frontiers Planet Prize.*

3.4 IIASA Flagship Report

IIASA launched the IIASA Flagship Report "Systems Analysis for Sustainable Wellbeing. 50 Years of IIASA Research, 40 Years After the Brundtland Commission, Contributing to the Post-2030 Global Agenda", during the 78th session of the 2023 UN General Assembly, co-sponsored by the Permanent Missions of Austria and South Africa. The report is a landmark publication chronicling the extraordinary 50-year journey of IIASA, complimented with a foreword from H.E. Alexander Van der Bellen, the Federal President of the Republic of Austria. The editors of the report are one man and one woman, and the report was authored by a total of 70 scientists and professionals, comprising 27% women scientists, ranging from early career researchers to emeritus research scholars.

On her involvement in the Flagship Report:

"Coordinating the chapter was both challenging and rewarding. First, we aimed to cover a vast body of research from three thematic areas: food security, ecosystems, and biodiversity. Since the 1970s, IIASA researchers have done a sea of ground-breaking work in these fields; thus, the challenge was to pay tribute to all of its aspects in an attractive way with reverence to the word limits. For me personally, it was a great opportunity to learn about work done at IIASA, both in the past and currently. It was also truly inspiring to place myself in the "IIASA universe." Another challenge, and an opportunity at the same time, resulted from the large number of contributors and co-leading authors. This allowed me to get to know many colleagues from across the Biodiversity and Natural Resources Program better. However, it was naturally difficult to manage inputs and coordinate so many extremely busy schedules. I had to be careful with organizing more meetings, but also bold with sending reminders. At the same time, we had understanding for each other, and I enjoyed our interactions. I would like to thank everyone again! I also had great support from Petr Havlík, who stepped in many times with his expertise, advice, and sometimes authority. We also had a great collaboration with Stefanie Andruchowitz, who did a difficult and important job of communicating between the chapter coauthors and the report editors."

4. Work-life balance and organizational culture

4.1 Institutional policies to support work-life balance

Fostering work-life balance in an international research institute requires a multi-pronged approach, addressing both cultural and practical aspects. An integral part of the IIASA Gender Equality Plan is to provide the institutional conditions necessary to offer a safe space for women and the importance of work-life balance through leadership actions and institute policies. Establishing open and transparent policies and procedures ensures fairness and equality. IIASA policies and procedures are made accessible to all employees, to ensure transparency in decision making and reduce potential bias and prejudices based on gender.

IIASA has made huge strides in developing a performance management system – WorkCompass – which was rolled out in 2022. The system is intended to provide a standard format for measuring performance and career goals to minimize subjective bias on promotion and merit increase.

A home-office policy was implemented to reduce commuting time. By eliminating commutes, remote work saves money related to transport costs and helps to reduce greenhouse gas emissions. Moreover, working from home offers a variety of benefits, both for employees and employers. It improves work-life balance as the employee has more flexibility in scheduling daily activities and parents can take turns attending to parenting duties and find a better balance between their professional and personal lives. Employers can save on office space and utilities.

In 2020 the IIASA Executive rectified an inequality between EU (European Union) citizens and non-EU citizens in IIASA's private insurance system by reducing the family benefits (e.g. salary compensation for staff on parental leave) from 2000 euros a month to 1000 euros a month under the equal system.

In 2023, family benefits offered by IIASA were extended to same-sex couples who registered in the Austrian Registration Confirmation.

A dedicated task force completed reviewing and modernizing existing IIASA policies including the policy on Good Scientific Practice and the Scientific Dispute Resolution Policy and Procedure, and aided in the establishment of the Committee on Ethics and Research Integrity. The policies aim to address potential gender bias in academic publications and other scientific output.

In addition, IIASA launched a Whistleblowing Reporting System to promote the disclosure of suspected operational malpractice while simultaneously protecting the individuals who report such conduct from retaliation and to protect individuals from false or careless accusations. This system provides a safe channel for employees to report potential gender issues and prevent harm to the Institute.

4.2 Social Club and Works Council

Social clubs provide a space for people to connect outside of work pressures. This fosters friendships, improves communication, and builds trust. Stronger relationships in turn lead to better teamwork and collaboration in the workplace. The social club also plays an important role in shaping a positive and inclusive culture.

Every IIASA staff member with an active contract is a member of the Staff Social and Cultural Association (SOCU). SOCU exists to coordinate the social activities of members, encourage a welcoming and vibrant community, nurture staff wellbeing, and promote sustainability and cultural integration within the IIASA community and in Austria.

Matters related to employee-employer relations are handled by the IIASA Works Council. The SOCU Board coordinates with the IIASA Directorate and Works Council when members' interests and concerns bridge these areas of responsibility.

The IIASA Women in Science Club (WISC) was formed in 2017 as a network to provide professional development opportunities and support for women to navigate their careers connected to science. WISC is open to all IIASA staff members irrespective of gender or professional background. WISC members learn from each other's experiences, speak openly about the challenges they face, and work together to improve the research community and work environment.

IIASA – SOCU Football club – open to all genders.

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IASA – SOCU Harvest Lunch

IIASA champions sustainable transportation. The Institute's active participation in "Austria Cycles to work" ("Österreich radelt zur Arbeit") that took place from 20 March to 30 September 2023, aligns perfectly with its race-to-zero emissions commitment. The IIASA cycle team consisted of all genders and included both scientific and professional employees. This dedication earned IIASA and its SOCU impressive recognition in "Niederoesterreich Radelt 2023":

- 1st Place: Clubs with 201-1,000 members
- 1st Place: Companies with more than 250 employees

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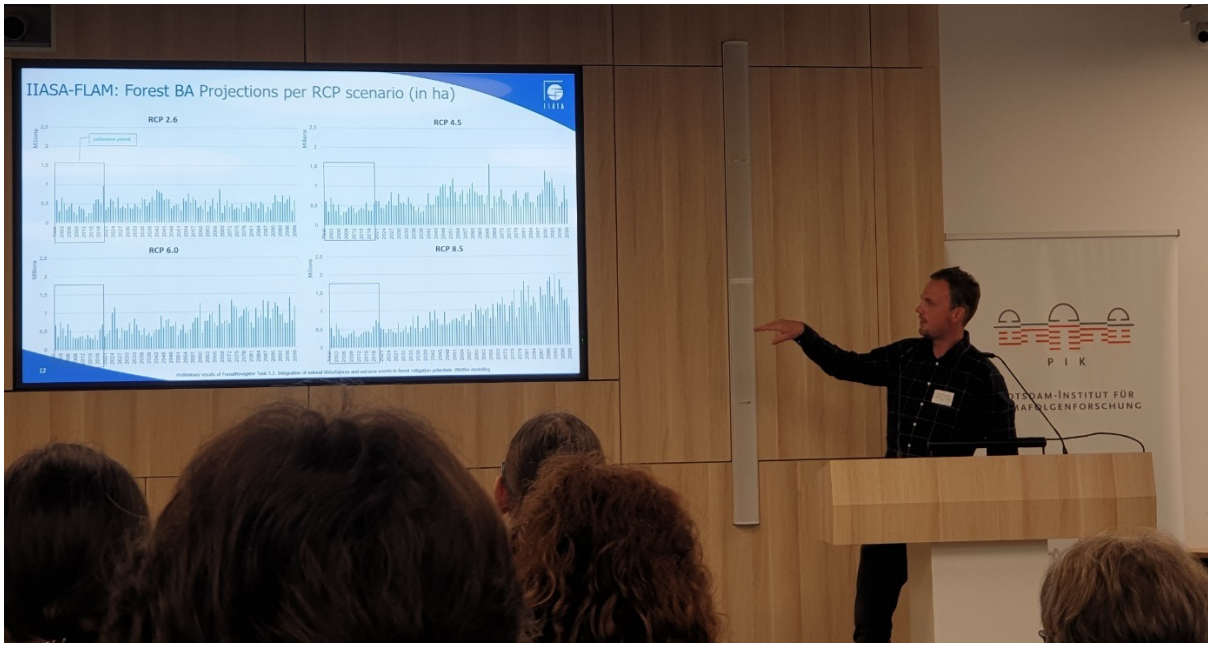
4.3 Participation in scientific activities outside IIASA

Opportunities for in-person or virtual participation in scientific activities are beneficial for advancing research knowledge, gathering data, collaborating with colleagues, and disseminating research findings. IIASA scientists are expected to attend conferences and workshops to present research findings, share and receive feedback, develop professional skills, learn about new developments in their fields, attend meetings, visit labs and facilities, and network with colleagues. Business travel also includes conducting fieldwork, such as collecting data, observing phenomena, or engaging with different communities related to a particular research topic. IIASA scientists also periodically present research findings to policymakers or stakeholders by disseminating research results and advocating for their implications, thus increasing the visibility and reputation of IIASA.

Table 9. Participation in external scientific activities (conferences, seminars, etc.)

Gender	Number of participants (in person or virtual)	Number of travelers as participant	Number of travelers as speaker	Number of travelers as trainer
Women	548	163	208	10
Men	961	279	404	14

IIASA experts Keywan Riahi and Leila Niamir, Winston Chow, Co-Chair WGII at the Intergovernmental Panel on Climate Change (IPCC), Eric Zusman from the Institute for Global Environmental Strategies (IGES), Yoshiki Yamagata from Keio University, and newly elected IIASA Council Chair Kazu Takemoto presented the Joint Research Project on City Transformation, supported by the Ministry of the Environment, Japan at COP 28 in Dubai.



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Andrey Krasovskiy participated in the workshop "Drivers of Climate Risks in Europe: Harmonizing Research on Impact Attribution of Past Events," on 22 September 2023 at the Potsdam Institute for Climate Impact Research (PIK) in Potsdam, Germany.

Sustainability Research and Innovation (SRI) Congress 2023 in Panama.

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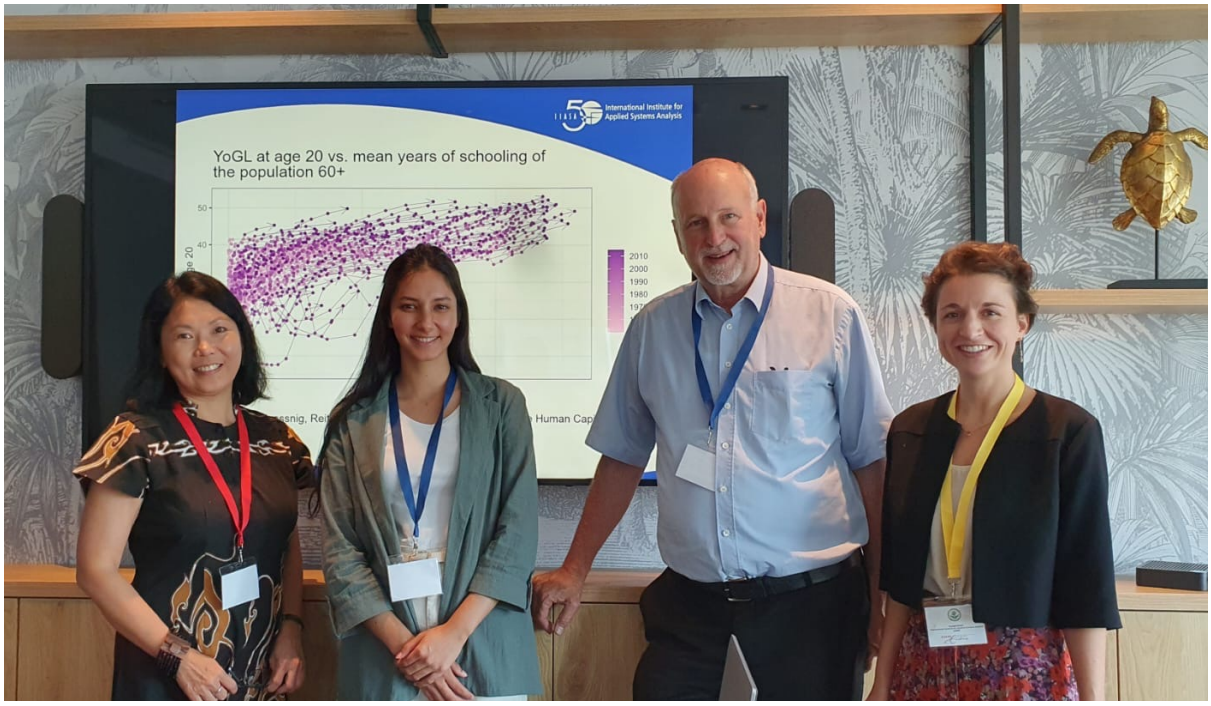
Lower Austria Science Fair 2023



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2023 International Society of Quality-of-Life Conference in Rotterdam

4.4 Capacity Building and Personal Development Training Program

4.4.1 IIASA capacity building for staff

In 2023, a total of 104 capacity-building initiatives were organized by IIASA, comprised of 30 workshops conducted by the Capacity Development and Academic Training (CDAT) Unit, 40 workshops by research programs, two workshops organized by the Women in Science Club (WISC), seven workshops by the Information and Communication Technologies (ICT) Department, five workshops by the Human Resources Department, and 20 workshops by the Communications and External Relations (CER) Department.

The CDAT team organized a monthly session of the Systems Analysis reading group, which is open to all staff and does not discriminate on the basis of gender, either in the announcements or selection of texts, nor during the execution of the events.

4.4.2 External training

The IIASA Human Resources Department funded individual personal development for 10 women and six men. The IIASA Staff Social and Cultural Association (SOCU) provides an educational subsidy for personal development. In 2023, 12 employees (10 women and two men) applied for and received SOCU educational subsidies for completed language classes.

4.4.3 Young Scientists Summer Program (YSSP)

Every summer since 1977, IIASA hosts up to 50 doctoral students from around the world in its Young Scientist Summer Program (YSSP). The program was started by former IIASA Director General Roger Levien with funding from IIASA Member Organizations and various other contributors. YSSP fellows undertake a scientific project within the scope of their PhD on a topic related to the IIASA research agenda. Participants work under the direct mentorship of an experienced IIASA scientist in a unique interdisciplinary and international research environment. They are required to produce a paper (serving as the first step towards a publishable journal article) and have the opportunity to build up contacts for future collaboration within the Institute's worldwide network.

Adil Najam, President at WWF and IIASA Peter de Jánosi Visiting Fellow presented a workshop for 2023 YSSP participants.

Following two years of a hybrid program due to the COVID-19 pandemic, starting in 2021, the YSSP was again able to welcome participants in person to the IIASA premises in Laxenburg, bringing together around 50 young minds from 18 to 23 nationalities for a three-month experience working with scientists at IIASA.

Table 10. Young Scientists Summer Program participants at IIASA 2021-2023

Year	Women	Men	Total	Nationalities
2021	29	30	59	Austria, Belgium, Brazil, Canada, People's Republic of China, Colombia, Finland, France, Germany, India, Italy, Rep. Korea, Mexico, Romania, Russian Federation, South Africa, Sweden, United Kingdom, United States (19 countries).
2022	27	22	49	Austria, Brazil, Canada, People's Republic of China, Colombia, France, Germany, India, Indonesia, Israel, Italy, Japan, Rep. Korea, Nepal, South Africa, Sweden, United Kingdom, United States (18 countries).
2023	22	28	50	Austria, Brazil, People's Republic of China, Denmark, Finland, France, Germany, Ghana, India, Indonesia, Islamic Republic of Iran, Israel, Italy, Japan, Rep. Korea, Mexico, Nepal, Nigeria, Pakistan, Poland, Spain, United Kingdom, United States (23 countries).

Participants of the 2023 Young Scientists Summer Program

4.5 Parental leave

Parental leave offers a wide range of benefits for individuals, families, and the Institute. Studies suggest it can lead to lower rates of postpartum depression and anxiety, and better overall physical health for both parents. The time off work allows parents to focus on building a solid foundation for their family and alleviate the stress of juggling work and childcare responsibilities, leading to a better sense of balance and potentially increased job satisfaction.

Four female (FTE 3,5) and two male (FTE 1,8) IIASA employees took parental leave in 2023.

4.6 Annual leave

Annual leave allows for valuable time to recharge and connect with loved ones, fostering stronger personal bonds. While there are no direct legal consequences for not taking paid leave, there can be several negative repercussions for both individuals and employers when employees forego their allotted time off. Constantly working without breaks can lead to burnout, characterized by exhaustion, cynicism, and reduced effectiveness. This can manifest in decreased work quality, increased errors, and lower overall productivity.

Figure 1 below shows the percentage of annual leave that has been left unused compared to the days entitled for the year 2023. The average percentage of annual leave left unused across the entire IIASA for 2023 is about 33%. It is important to note that any annual leave that goes unused at IIASA expires after two fiscal years and cannot be compensated financially.

When analyzing the data by gender, scientists at IIASA have used about two thirds of their annual leave entitlement. Female scientists have 39.94% unused annual leave days, which is slightly higher compared to 30.47% for male scientists. For the operational staff, the data shows that male employees have 32.53% of unused annual leave days, which is higher than for female employees.

Employees who do not take breaks are more susceptible to getting sick, leading to higher absenteeism and potentially disrupting workflow. Employees who feel overworked and undervalued due to a lack of opportunity to take leave are more likely to experience decreased morale and engagement, impacting overall company culture. A culture that discourages taking annual leave can contribute to higher employee turnover, leading to costs associated with recruitment and training of new staff.

Therefore, while not taking paid leave might seem like a way to "get ahead" or demonstrate dedication, it can backfire in the long run, negatively impacting both individual and company wellbeing. It is essential to utilize annual leave for its intended purpose: to allow for rest, rejuvenation, and personal time, ultimately leading to a more balanced and productive work environment for everyone involved.

Table 11. Percentage of unused annual leave of IIASA staff - 2023

Profile/Grade	% of Unused leave days - men	% Unused leave days - women
Research Assistant (R)	16.49%	40.60%
Researcher (R1)	41.79%	33.14%
Research Scholar (R2)	30.95%	33.46%
Senior Research Scholar (R3)	26.05%	23.65%
Principle Research Scholar (R4)	30.11%	23.75%
Software Developer(S1)	41.81%	75.00%
Software Programmer (S2)	36.77%	31.52%
Emeritus and Senior Advisor (E)	33.53%	40.73%
Total for scientific employees	30.47%	31.94%
Operational - O1	91.67%	23.22%
Operational - O2	31,75%	26.59%
Operational - O3	27.32%	27.62%
Operational - O4	50.65%	35.30%
Operational - O5	29.12%	26.39%
Operational - 06	23.59%	29.46%
Operational - 07	21.89%	60.00%
Total for operational employees	32.53%	28.20%

** The grading of operational staff was completed in January 2024; however, the entitled annual leave days are based on data as of 31 December 2023.*

5. Measures against gender-based violence

IIASA prioritizes fostering a safe and inclusive environment where everyone feels respected. Gender equality is fundamental to this commitment, and IIASA believes all individuals deserve equal opportunities and treatment regardless of gender. The Institute has a zero-tolerance policy for discrimination, sexism, and sexual harassment, and IIASA had no unresolved incidents of this nature in 2023.

6. Lessons learned and recommendations

Creating a truly equitable environment at IIASA requires dedicated and ongoing efforts. This report explores the valuable lessons learned from implementing a gender equality plan at IIASA based on the indicators developed and collected for the year 2023. The Institute embarked on this journey to foster a more inclusive space where all genders can thrive. The process presented both challenges and triumphs, each of which has offered valuable insights. This report delves into the key takeaways of this exercise, focusing on strategies that proved successful, areas requiring further attention, and the importance of continuous adaptation. By sharing these experiences, IIASA hopes to contribute to the collective effort to achieve gender equality across institutions.

Since the launch of the Gender Equality Plan in 2023, IIASA has developed 10 out of 13 indicators for monitoring the implementation of the Gender Equality Plan to be used for producing this report. The indicators should be maintained and updated to include other actionable diversity elements whenever necessary. Three indicators not yet developed in 2023 are (i) gender representation of employees taking part in IIASA career development activities; (ii) number of female and non-binary R1 and R2 researchers taking part in the IIASA mentoring program; and (iii) information on career progression. The report therefore provides the number of career development and mentoring activities throughout the year without specific information on gender representation of the participation. Information on career progression is not available as IIASA embarked on a restructuring exercise to establish researcher profiles in 2021 and apply a new grading system for operational employees by the end of 2023.

6.1 Efforts to improve gender representation in leadership positions

As of 2023, IIASA has a 20% gender gap in its workforce, with fewer women than men in senior scientist positions as well as in operational leadership positions. The Institute should actively work towards creating a more inclusive workplace, with a focus on increasing the number of women in senior scientist roles, as well as in leadership positions.

- **Targets and quotas:** IIASA could consider implementing targets or quotas (where legally permissible) to increase the representation of women at senior and leadership levels.

- **Gender and Diversity Statement:** Applicants for supervisory roles at IIASA may be asked to provide a statement on their contributions to gender equality and their plans for advancing diversity, equity, and inclusion.

6.2 Recommendation for reducing the gender pay gap

The gender pay gap persists as a major hurdle in achieving workplace equality, but it is only statistically significant (after adjusting for non-gender related factors) for the R-2 level. Here are several recommendations that can help close the gap:

- Pay transparency: Publish salary ranges for open positions and conduct regular pay audits to identify and address any discrepancies.
- Diversity, equity, and inclusion training for anyone involved in hiring processes.
- Ensuring diverse hiring panels and involving trained HR personnel or the Gender Equality Officer in the application process and assessment.
- Role of IIASA Leadership: Supervisors should take an active role in ensuring that their staff are properly recognized (promoted) and compensated. Program Directors and Research Group Leaders should be evaluated on staff performance and their role in supervising and career progression.

6.3 Strengthening the gender dimension in IIASA scientific activities and output

The recommendation for strengthening the gender dimension in scientific activities and output is:

- To establish a network for gender research at IIASA.
- To promote scientific exchange among gender researchers at peer institutions.
- To arrange training and workshops for IIASA staff to support the development of a gender perspective, following the IIASA Strategy and Research Plan, so that gender perspectives will be increasingly integrated into research.

6.4 Improving the work culture at IIASA

- **Addressing systemic issues:** IIASA should continue an internal process to proactively identify and address elements of diversity that were previously not considered in policies or practices, but which may cause bias, discrimination, or unfair treatment. This could, for example, be done by including the topic of diversity, equality, and inclusion as an agenda item for all-staff meetings and ensuring that the IIASA Executive clearly communicate elements of diversity they are unable to consider in a given situation, and the reasons why. If different definitions of diversity are used at different levels, this should be clearly stated. This process should involve relevant stakeholder groups.

- **Develop a policy of promoting diversity and inclusion through visibility:** Outline specific goals and targets for increasing the visibility of women and underrepresented groups of people at IIASA (e.g., no all-male panels).

- **Unconscious bias training:** Educate managers and employees on unconscious bias in recruitment, promotion, and salary decisions.

- **Work culture:**

    - The promotion of open communication is an important element of addressing the high proportion of unused leave: Researchers should be encouraged to discuss workload concerns with supervisors and colleagues without fear of repercussions.
    - **Support for working parents:** Offer flexible work arrangements and affordable childcare options to help parents stay competitive in the workforce.
    - **Discourage overwork:** Disincentivize working long hours by setting clear expectations, promoting an efficient use of time, and discouraging constant availability. Consider adding share of unused leave as an indicator for supervisor performance.
    - **Promote breaks and vacations:** Encourage all employees to take regular breaks throughout the day, utilize their vacation time, and disconnect from work during their time away from the office.

Implementing these strategies requires ongoing effort and commitment from both the Institute's leadership and employees. Fostering a culture that respects wellbeing and empowers employees to manage their workload can significantly improve work-life balance and contribute to a more productive and sustainable research environment.

6.5 Recommendation for mentoring and personal development program

- **Mentorship and networking:** Develop mentorship programs specifically aimed at supporting early-career researchers and women researchers. Facilitate networking opportunities within their fields. Research quality and impact improve with diverse representation, including underrepresented scientists.

6.6 Improving indicators and data collection for reporting gender equality

- **Data collection and monitoring:** Improve robust data collection systems to monitor progress, identify ongoing areas of inequality, and ensure accountability.

    - Provide a comparison of the gender pay gap within different research programs.
    - Include leading indicators (e.g., participation in training programs) to track progress toward long-term goals.

    - Include the fluctuation report of women and men leaving IIASA.
    - Employee involvement: Involve employees in selecting and interpreting indicators. This fosters transparency and creates a sense of ownership.
    - Collect data on the level of education attained by staff to account for under-employment as an area of workplace inequality.

- **Intersectionality:** Recognize that gender intersects with other factors like race, ethnicity, sexual orientation, and disability and tailor initiatives accordingly.

6.7 Recommendations beyond the workplace

- IIASA should share data, evidence, and learnings with other organizations so that those without the necessary resources can benefit. Lack of data on certain diversity elements should not limit actions where data from other organizations or systems are available.

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