

Science Academies of India: Contributions towards Women in Science



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SCIENCE ACADEMIES OF INDIA

Science Academies of India

- Indian Academy of Sciences (IAS) Headquarters Bengaluru (Founded in 1934)
- Indian National Science Academy (INSA) Headquarters New Delhi (Founded in 1935)
- National Academy of Sciences (NASI) Headquarters Prayagraj. (Founded in 1930)

Objectives:

- To Promote Science
- To harness scientific knowledge for National Welfare
- Nurture Scientific Talent
- Acts as a resource pool of knowledge

“Women in Science” Programmes of the Academies

Council of the Indian Academy of Sciences had in January 2003 constituted a committee on “Women in Science”:

- To address the issue of underrepresentation of women
- Came up with many initiatives and action plan for consideration by the Council and Fellowship
- Led to the formation of a Panel for "Women in Science" (WiS), in January 2005

Current Chairs of the Academy “Women in Science” Panels are:

- IAS: **Shobhana Narasimhan**
- INSA: **Shobhona Sharma**
- NASI: **Manju Sharma**
- The Steering Committee of the Inter-Academy Panel of “Women in Science” consists of:
Manju Sharma, Shobhona Sharma and Rohini Godbole

REPORTS AND RECOMMENDATIONS

Some reports on Empowerment of Women:

- Science Career for Indian Women: An examination of Indian women's access to and retention in scientific careers. INSA Report (2004).
- Evaluating and enhancing women's participation in scientific and technological research. The Indian initiatives. - A report of National Task Force for Women in Science, DST (2005).
- Trained scientific women power: How much are we losing and why? IAS-NIAS report (2010).
- Role of women scientists as teachers in promotion and application of science and technology. A report from NASI (2012-2013).
- Women Scientists in India. AASAA report (2013).
- Women in science and technology: A vision document. A report from Inter Academy Panel on "Women in Science" (2016).
- Ethics in Science Education, Research and Governance. INSA Publication (2019).

The pdfs of each of these reports are available at:

https://www.insaindia.res.in/pdf/ws_reports.pdf

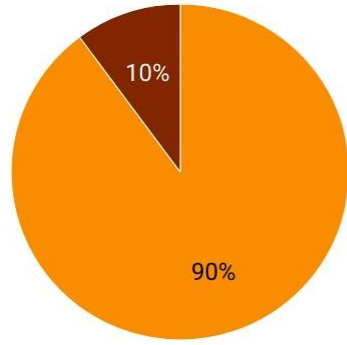
Recommendations:

- Gender equality to be a part of the core values of every academic institution and be recognized that equitable treatment is a constructive approach in creating viable and cooperative academic communities.
- Full and equal participation with mandatory positions of women in all academic/administrative activities should be promoted.
- Ethical training imparted to members should include training of members of both sexes on gender sensitivity.
- Sexual misconduct as well as gender-based harassment in the workplace have to be considered as academic misconduct.
- The availability of accessible, affordable and high-quality care services viz campus housing, child-care and other services, lounge facilities, flexible working hours must be considered an important ingredient in making the environment friendly and safe for women and to create a gender-equitable atmosphere.
- Funding agencies must support workshops and other activities to promote diversity and monitor progress on gender equality.

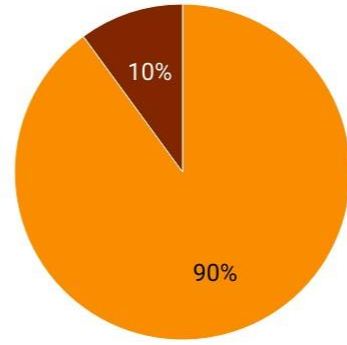
CURRENT DISTRIBUTION OF ELECTED FELLOWS

Fellows elected in the three academies

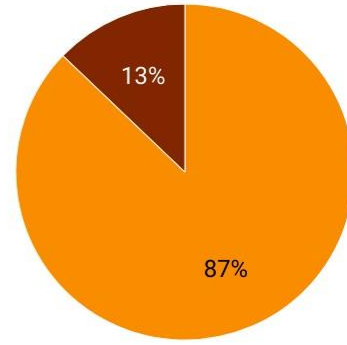
Men
Women



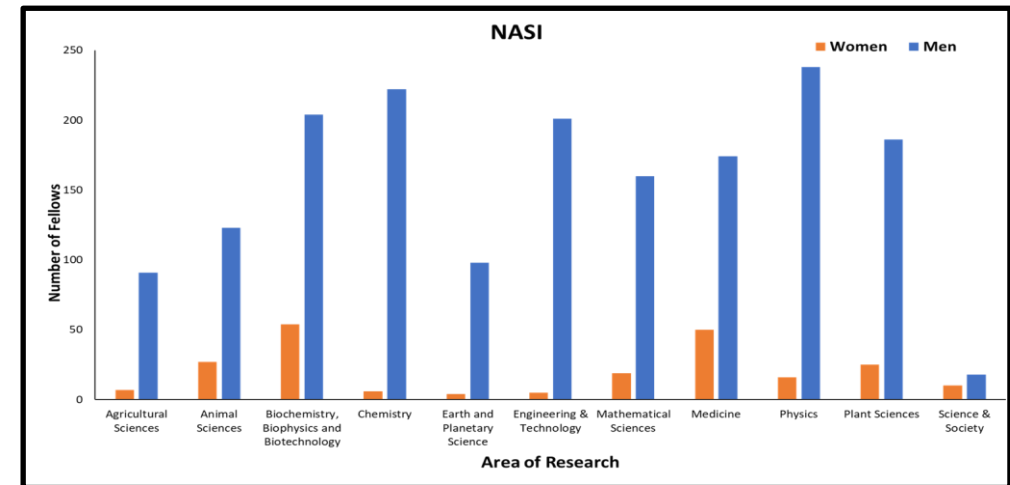
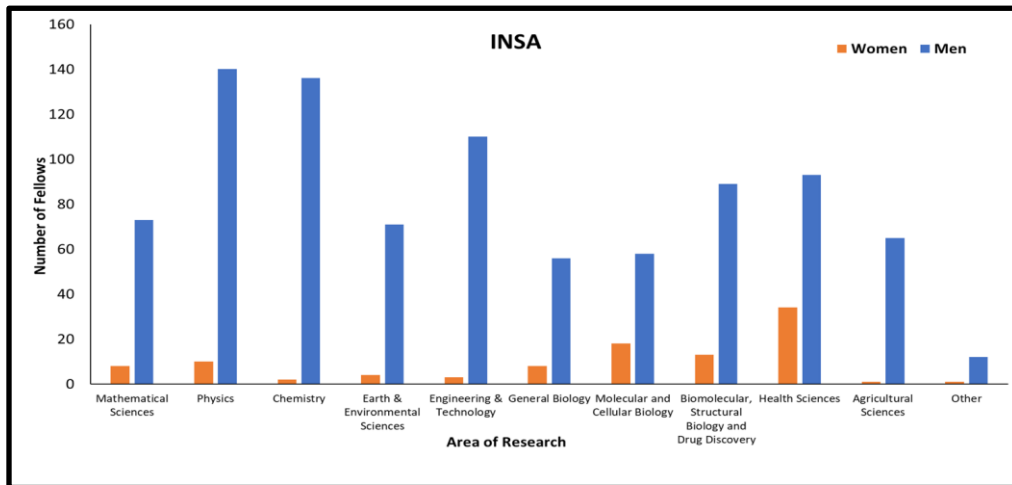
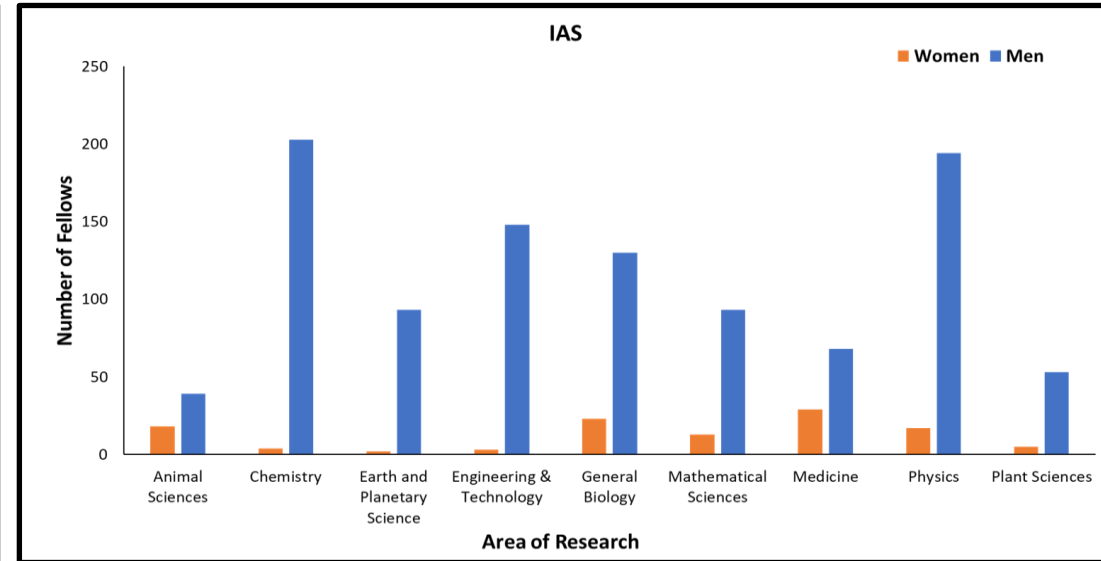
INSA



IAS



NASI

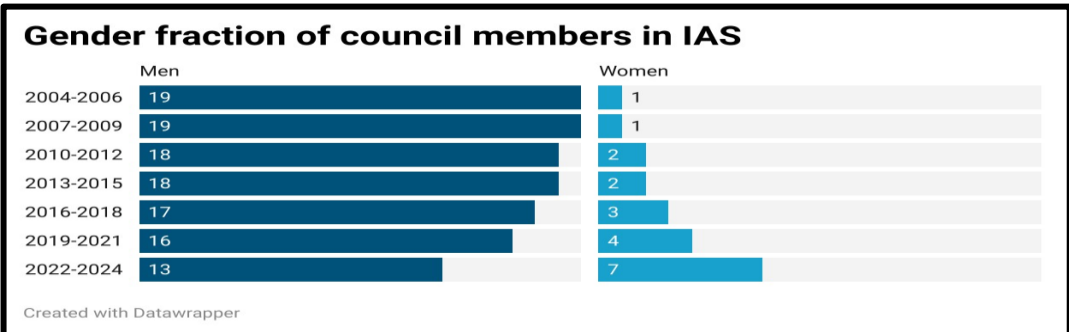
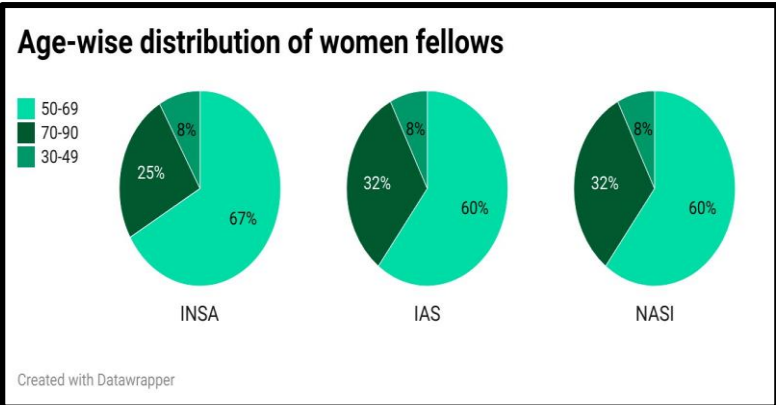
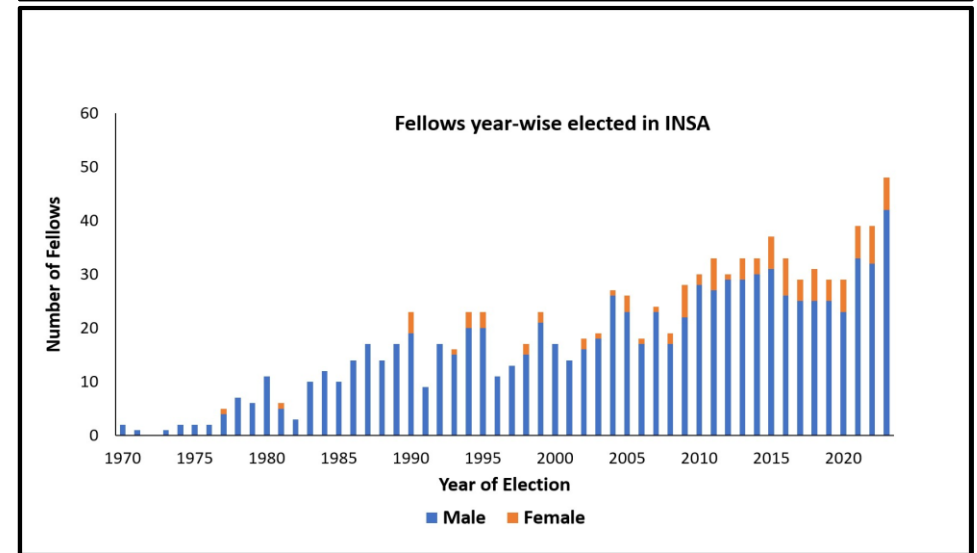
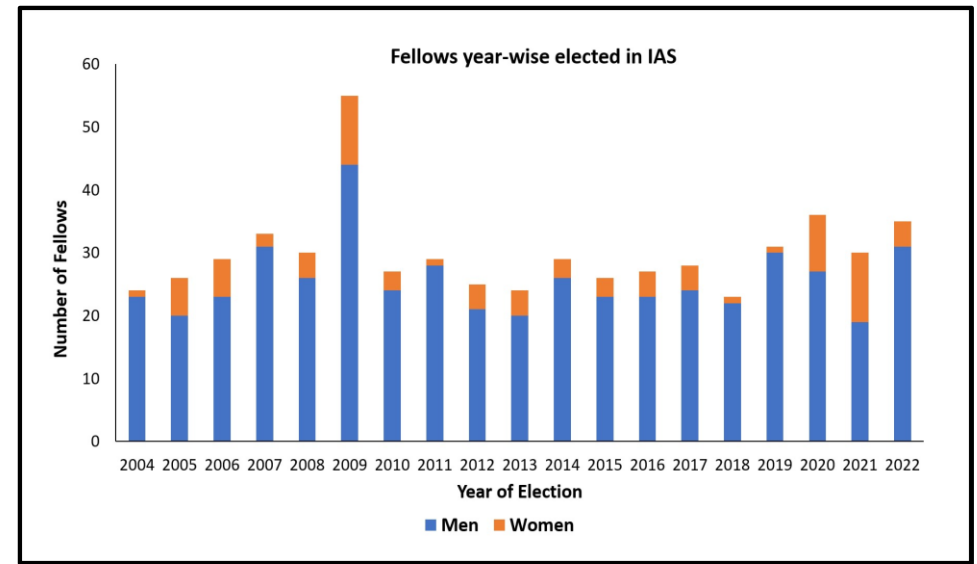
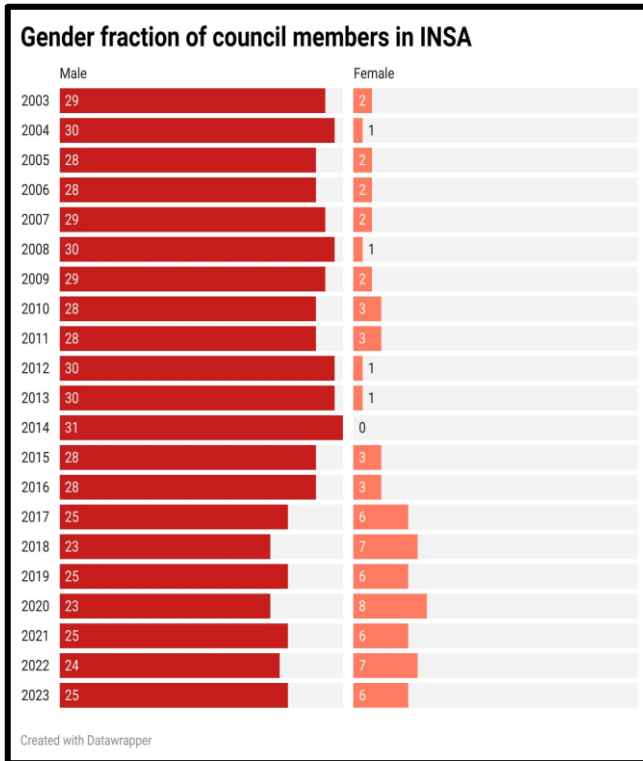


The overall representation of women in the Academies is still only about 10 %.

Amongst different areas of research, in Chemistry, Earth Sciences and Engineering it remains far below the average.

AGE DISTRIBUTION OF ACADEMY FELLOWS

YEAR WISE DATA ON COUNCIL MEMBERS AND FELLOWS



Over the years there has been significant improvements in the numbers of women elected in the Academies as well as in important bodies such as the Council.

ACTIVITIES OF WIS AND THE INTER-ACADEMY PANEL (IAP)

Activities

- IAS was the first Academy to set up initiatives on “Women in Science” in 2006.
- A book “**Lilavati’s Daughters**” containing Biographies and Autobiographies of about 100 women scientists of India, edited by Rohini Godbole and Ram Ramaswamy was published by IAS.
- INSA and NASI initiatives are ongoing to increase the participation of women at every level.
- It is a matter of great pride that NASI and INSA have had women Presidents -**Manju Sharma** and **Chandrima Shaha** in this millennium.
- Several reports, recommendations and task forces have been generated by the three academies.

Tasks of the current IAP

- Approaches where STEMM can help the development of women in rural areas. To provide an interface with the global STEMM community, the database “SWATI” has already been initiated.
- Compilation and regular updation of national Women in Science database. Creating and maintaining a web-page. Also, publicizing the work of the Inter-Academy Panel (communication and social media).
- Mentorship interactions and programmes to provide avenues for young women scientists to interact; collate inspiring stories of women scientists, summer programmes including leadership training programmes for women of different age groups.
- To facilitate a gender-neutral environment at the Academies, creating knowledge resources for institutions regarding gender bias and neutrality, pro-active nominations of women scientists for awards/ fellowships/ other forms of recognition. Public outreach and community participation.
- Plans to take up studies on different aspects of women’ participation in science such as: How conducive is the environment to successful performance by women?

FUTURE VISIONS AND GOALS

Future Visions

- All the academies are keen on gender equity.
- Empowerment of women in STEM.
- To achieve the participation of women on equal footing.

Goals

- To promote mentorship and gender sensitization.
- Setting up databases via Task Forces in specific areas of relevance to women scientists.
- To promote gender parity (administrative, financial, scientific) in Indian institutions.
- Planning of approaches of STEMM to improve the living and working conditions of Women in India.
- To foster cooperation between Natural Scientists and Social Scientists in the area of Gender Studies.
- To generate skilled human resources by training/re-training of women scientists as appropriate.

Acknowledgements

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