



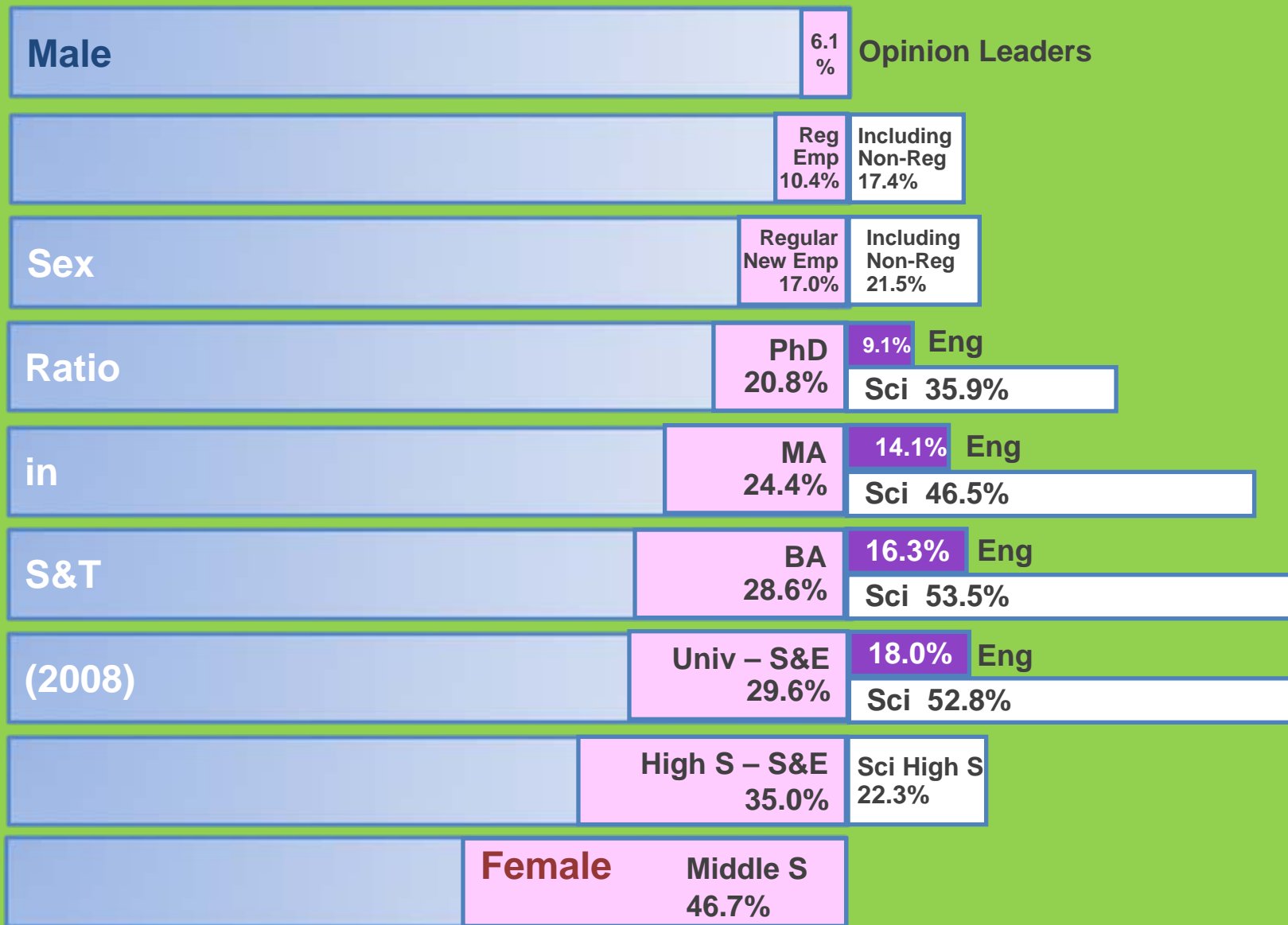
Effective Policies for Supporting Education and Employment of Women in Science and Technology : Case of Korea

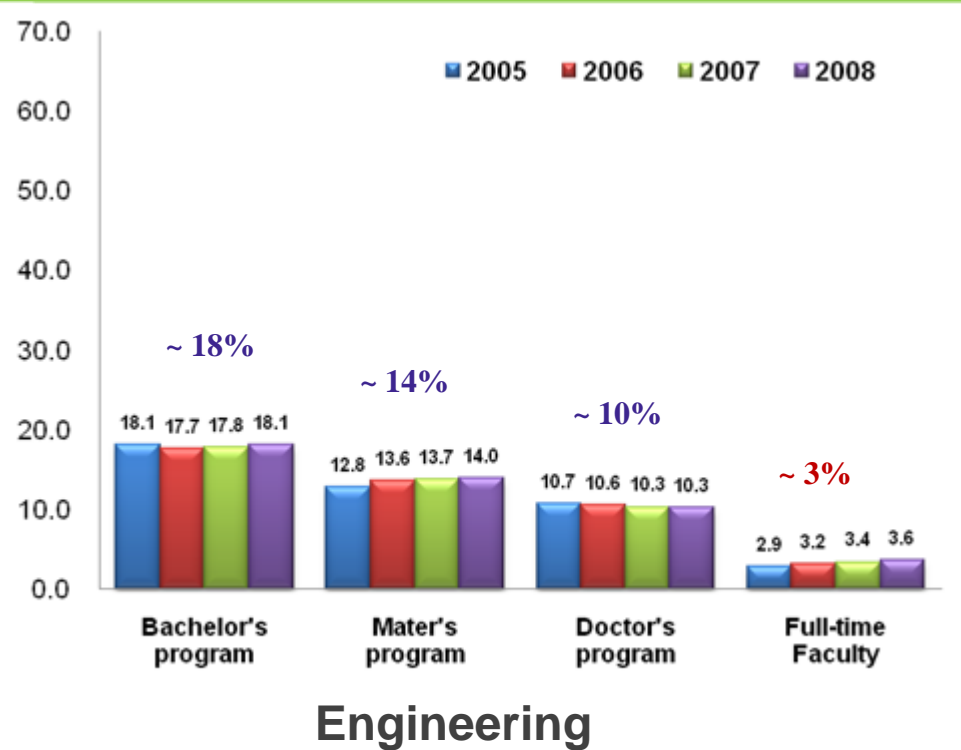
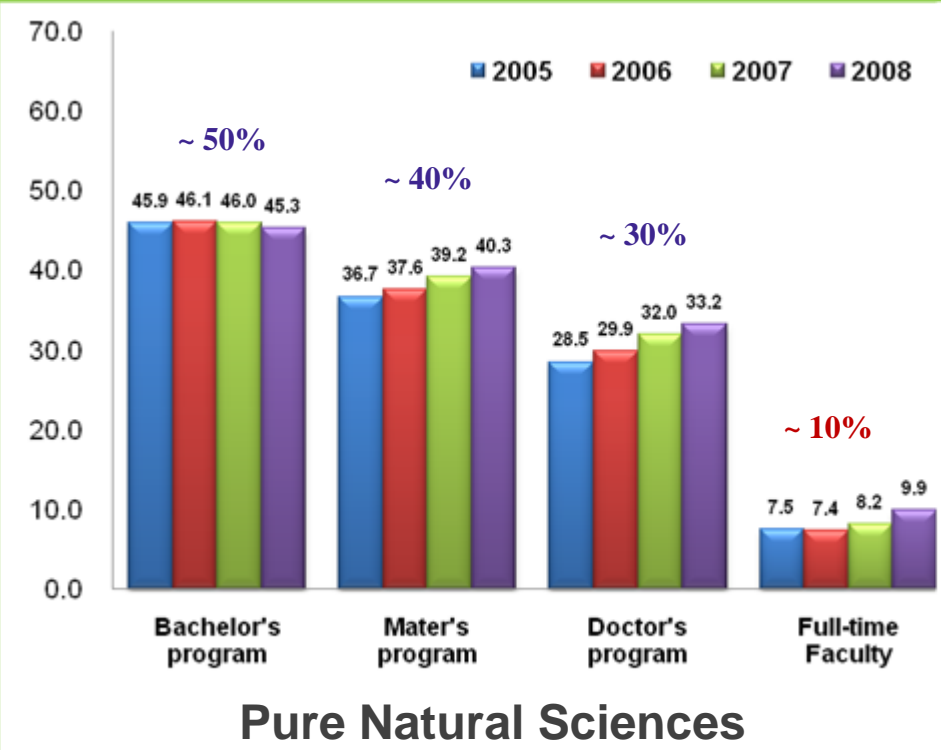
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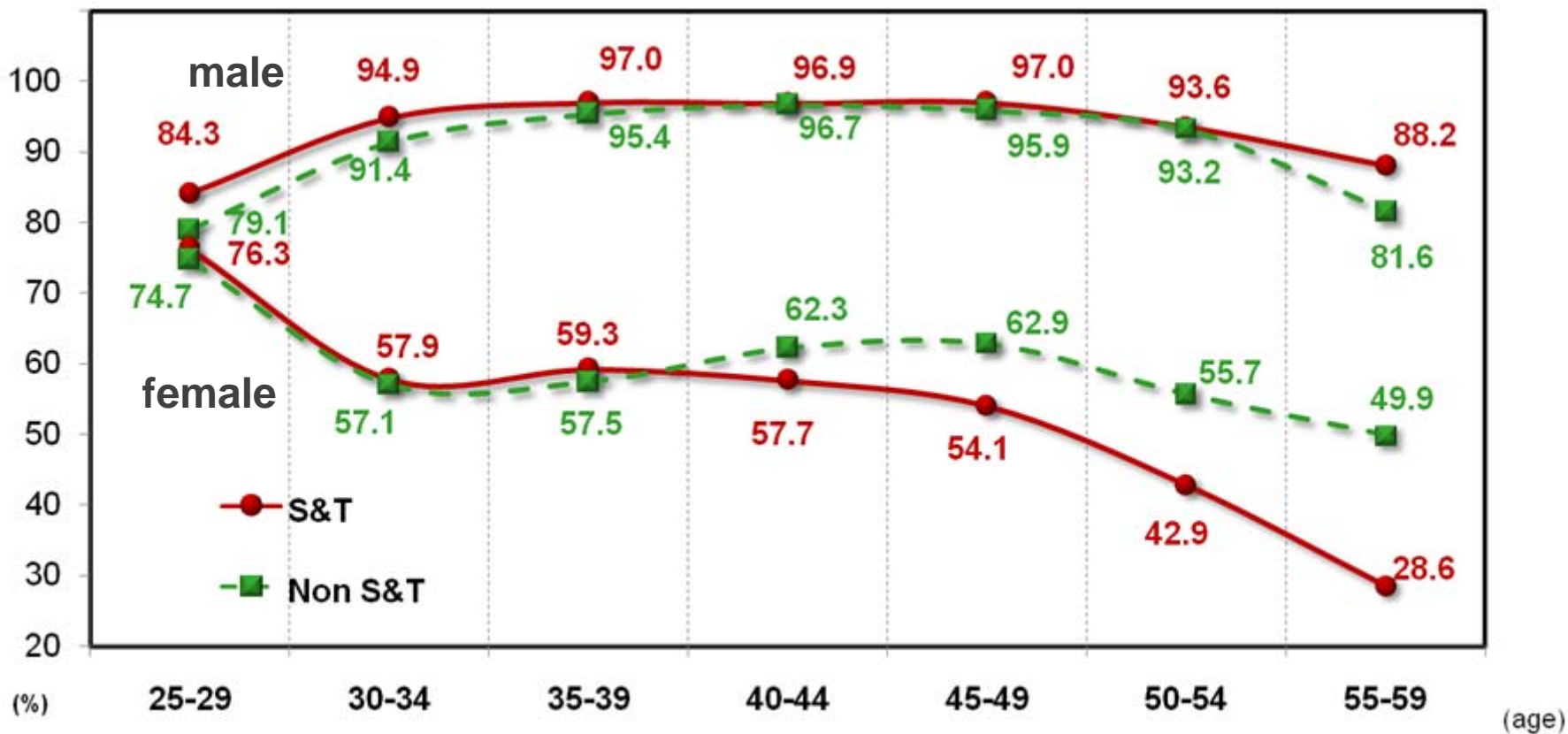


- Introduction : Women Resources in S&T, KOREA
- Key Policies and Outcome
- Proposals for Effective Policies and Programs





[Ratio changes of women in S&T at academia]

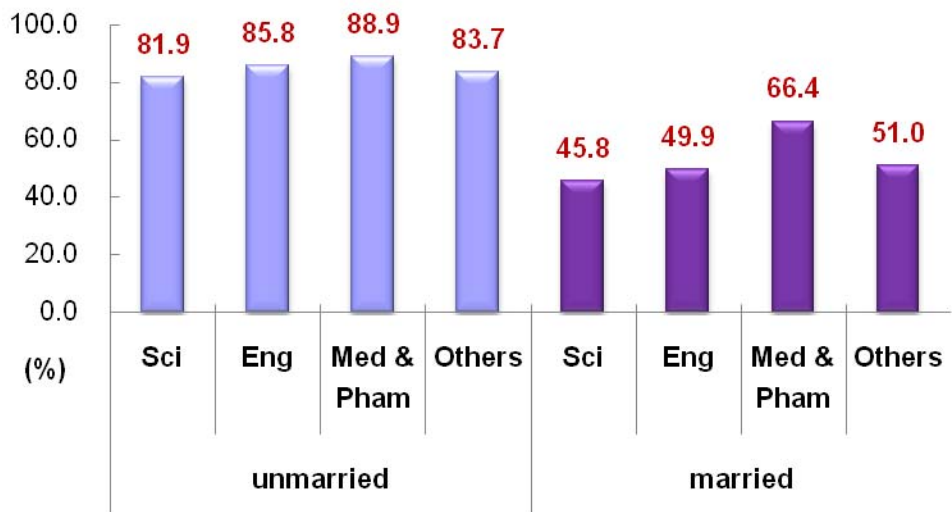


Source : STATISTICS KOREA, Report on Economic Activity Status and Participation Rate (2008)

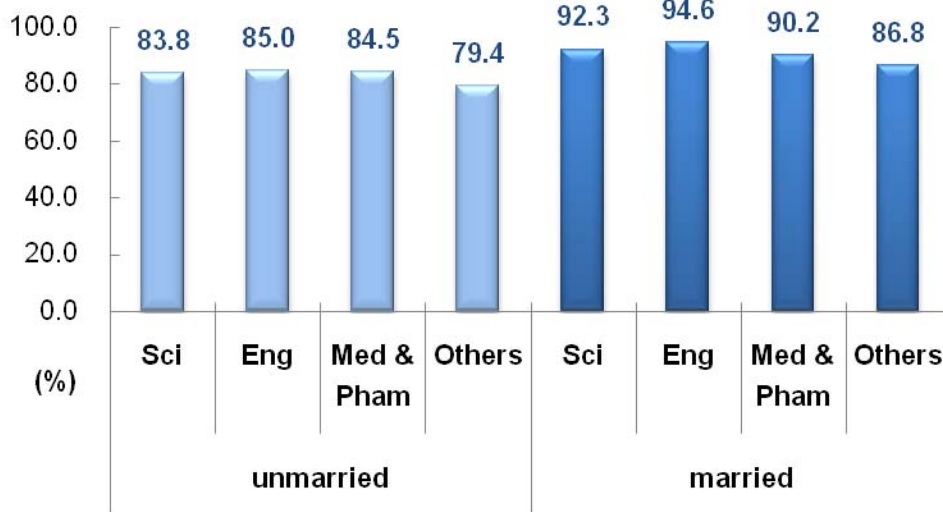
[Economic Activity Participation Rate]



Female



Male



Source : STATISTICS KOREA, Report on Economic Activity Status and Participation Rate (2008)

[Economic Activity Participation Rates of (un)married by major]



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S

- **High academic achievement** of female students
- Meets **OECD average of women Bachelors** in S&E
- **Increasing** ratio of women in **S&E Master's** programs

W

- **Decreasing ratios of girls** in 'Science High school' and S&E Bachelor's program
- **Low ratio of women** earning S&E doctorates
- **Low rate of economic activity participation** by women
- **High ratio of temporary workers** among women S&T employees

T

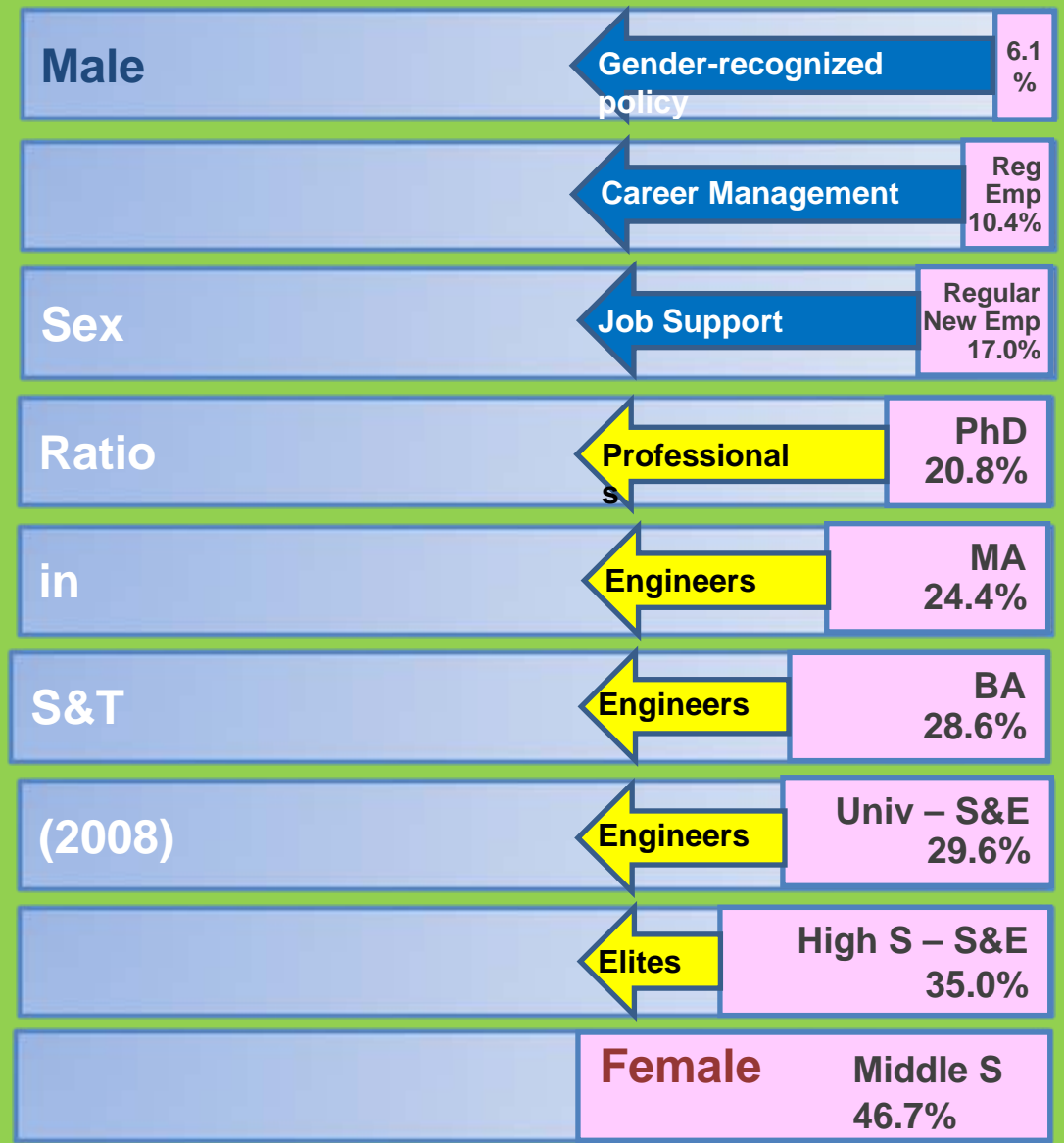
- **Male-oriented** education in S&E
- **Lack of infrastructure** for work-family balance
- **Criticism of reverse gender discrimination** for affirmative actions promoting women in S&E

O

- **Inadequate** human resources in S&E
- **Need** for development of **source technology** and diversity
- **Shortage** of economically active human resources

- **Recruitment Target System (RTS)**
 - **Promotion Target System (PTS)**
 - **Officer in Charge of WSE**
 - **Childcare Center**
 - **Research Funds Exclusively for Women Scientists and Engineers**
 - **ISWIST (2004 ~)**
- Legal action center : Policy research, Training, Information Hub, Supporting NGO's activity, WISTFIT project...

- **WISE Program (2001 ~)**
On/Off Line Mentoring
- **WIE Project (2006 ~)**
Leading University of engineering education for women
- **WATCH21 program (2004 ~)**
R&E program at engineering research lab



Supporting Programs for Women in S&T by Lifecycle Stage (2010)

| Stage Program | Elementary School | Middle School | High School | College | Graduate School | Unemployed | Employed | Retired |
|---|-------------------|--|--|--|---|---|--|---------|
| Education/ Training/ Mentoring | | <ul style="list-style-type: none"> • Mentoring • Visiting Lab • Sci Camp • Mathematics-Research Conference | <ul style="list-style-type: none"> • Mentoring • S&E Research Camp • S&E Research Conference • R&E Program | <ul style="list-style-type: none"> • Mentoring • International S&E Camp • R&E Program • Gender Recognized Edu. | <ul style="list-style-type: none"> • R&E Program • Leadership T. • Communication Training • New Research Technique T. | <ul style="list-style-type: none"> • Job Training (SC, LM, PS) • Leadership T. • Communication Training • New Research Technique T. | <ul style="list-style-type: none"> • Mentoring • Leadership T. • Communication Training • New Research Technique T. | |
| Career Development /Retention | | | | <ul style="list-style-type: none"> • Internship • Job Fair • Job Information • CV Clinic • Career Consulting | <ul style="list-style-type: none"> • Employment Subsidy • Job Fair • Job Information • CV Clinic • Career Consulting | <ul style="list-style-type: none"> • Employment Subsidy • Research Subsidy • Job Fair • Job Information • CV Clinic • Career Consulting | <ul style="list-style-type: none"> • Research Subsidy • Career Consulting • Networking | |
| Women Friendliness | | | | <ul style="list-style-type: none"> • Gender Recognized Education of Engineering • WIST-FIT | <ul style="list-style-type: none"> • WIST-FIT | <ul style="list-style-type: none"> • Recruitment Target System (RTS) | <ul style="list-style-type: none"> • Officer in Charge of WSE • RTS • PTS • WIST-FIT | |
| Transition of Social Recognition | | | | <ul style="list-style-type: none"> • National Conference of Women Scientists & Engineers | <ul style="list-style-type: none"> • National Conference of Women Scientists & Engineers | <ul style="list-style-type: none"> • National Conference of Women Scientists & Engineers | <ul style="list-style-type: none"> • National Conference of Women Scientists & Engineers • Minister Award (RTS) • NRF Award (WIST-FIT, NGO) | |



| Objective | Key Policy | Outcome |
|------------------------------|--|---|
| Education | WISE Women Into Science and Engineering | <ul style="list-style-type: none"> • 1,300 mentor-mentee pairs ('07) • 35,000 girls participated in WISE programs ('07) |
| | WIE Women In Engineering | <ul style="list-style-type: none"> • 52 new courses developed and 53 improved ('06-'08) • Employment rate of women: 66.1%('06)→76.8%('08) • Satisfaction : more than 80% of participants |
| | WATCH21 Women's Academy for Technology Changer in the 21 Century | <ul style="list-style-type: none"> • 315 teams and 2,238 female students participated ('04-'09) • Satisfaction: more than 90%of participants |
| Employment, Retention | Recruitment Target S. | <ul style="list-style-type: none"> • Rate of women recruits in institutes: 18.2%('03)→26.6%('09) • Rate of women faculty recruits: 5.2%('03)→6.5%('05) |
| | Promotion Target S. (recommended) | <p style="text-align: center;">Not measuable</p> |
| | Designation of Officer in charge of WSE | <ul style="list-style-type: none"> • High synergy with WIST-FIT project of ISWIST • Best practice of WIST-FIT is from the organization with active Officer in charge of WSE |
| | Research Funds exclusively for WSE | <ul style="list-style-type: none"> • Budget: US\$2.5('00)→US\$15.7('10) • Ratio of women project-managers: 6%('03)→14%('09) |
| | Childcare Center at S&T Research Complex | <ul style="list-style-type: none"> • 300 babies and toddlers, open 7:30~22:30 • WSE from 37 institutes are using. |
| | ISWIST Institute for Supporting Women in Science and Technology | <ul style="list-style-type: none"> • 40 policy-related research reports and proposals • 10,000 WSE trained/70% of job trainees are working • 25,000 WSE DB • Tens of programs developed |



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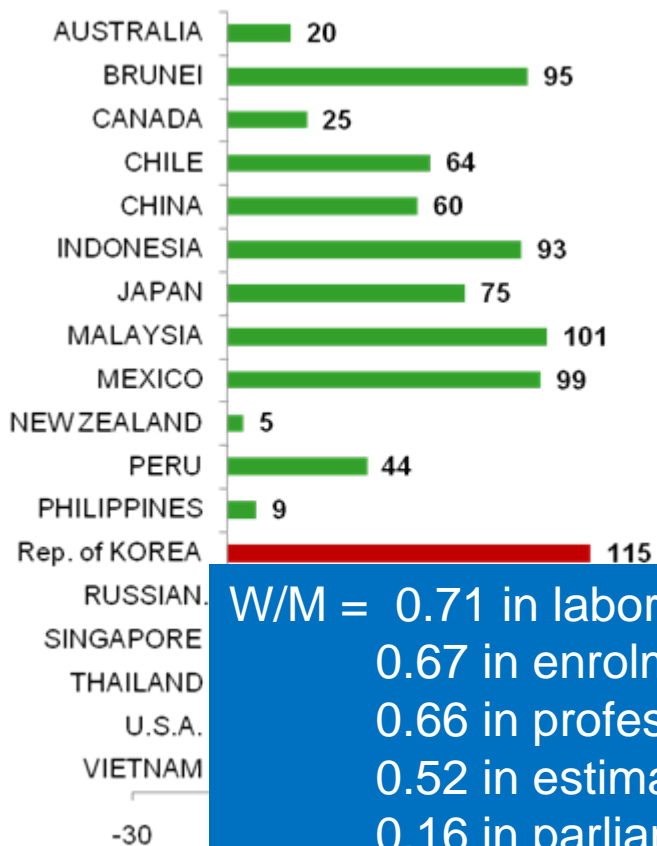


| Effective Policies/Projects/Programs | Comment |
|--|--|
| On/Off-line Mentoring Program | <ul style="list-style-type: none"> • Highly recommended in all stages of a woman's life in S&T |
| WIE Project : Leading university of engineering-education for women students | <ul style="list-style-type: none"> • Need to disseminate the developed programs to other college of engineering |
| Recruitment Target System | <ul style="list-style-type: none"> • Necessary for a time • Should be run concurrently with Employment Target System and Promotion Target System |
| Research Funds exclusively for Women Scientists and Engineers | <ul style="list-style-type: none"> • Encouraging for young scientists and engineers with experience in maternity leave or childrearing |
| Childcare Center at S&T Research Complex | <ul style="list-style-type: none"> • A strong needs exists to build new nursery schools at other S&T Research Complex. |
| ISWIST | <ul style="list-style-type: none"> • Action center for monitoring, steering, planning and implementing policies and programs for women scientists and engineers • A consolidated ISWIST will be launched in Jan, 2011 merging 3W projects. |

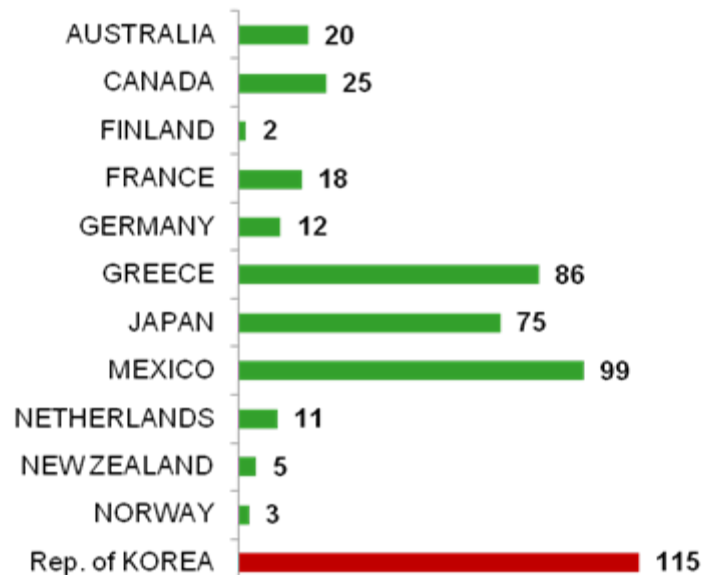


Gender Gap Index (2009)

APEC



OECD



W/M = 0.71 in labor force participation
 0.67 in enrolment in tertiary education
 0.66 in professional and technical workers
 0.52 in estimated earned income
 0.16 in parliament
 0.10 in legislators, senior officials and managers
 0.05 in ministerial positions

20 (rank)



Government policy for WSE must not stop at declaration.



Thank You !

www.un.org/womenwatch/daw/egm/gst_2010

