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**National Assessments on
Gender and Science, Technology and Innovation**

Country Results: Indonesia

The National Assessments on Gender and STI project is a collaborative initiative between Women in Global Science and Technology (WISAT), the Organization for Women in Science for the Developing World (OWSD) and futureInnovate.net. The current phase, funded by the Elsevier Foundation, tests the Gender Equality – Knowledge Society (GEKS) framework in six countries and one region: Brazil, India, Indonesia, Republic of Korea South Africa, the USA and the European Union. These countries were chosen because of the size of their STI sector and the existence of an STI policy environment.

The Gender Equality Knowledge Society (GEKS) indicator framework was developed in response to the situation that not only are many women — particularly those in the developing world — on the wrong side of the digital divide, they are on the wrong side of the knowledge divide: worldwide their capacity is grossly under-developed and under-utilized. They are at risk of becoming increasingly marginalized in the knowledge society and related science, technology and innovation systems. Not only do they have less access to information and technology, they are poorly represented in the educational, entrepreneurship and employment opportunities in science, technology and innovation (STI) that base a knowledge society.

The GEKS framework is organized into three sections – Inputs, Outcomes and Enabling Policies, each comprised of key data indicators:

| | |
|-----------------------------|---|
| Inputs | Health, social status, economic status, access to resources, agency, opportunity and capability |
| Enabling Policy Environment | National knowledge society policies; childcare, equal pay, flexible work, infrastructure; CEDAW status; gender mainstreaming in government institutions |
| Outcomes | Knowledge society decision making; knowledge economy; S&T decision making, STI participation |

Results and Findings:

From the national level research and data analysis, preliminary results affirm that women have lower levels of access to the productive resources necessary to support active engagement in the knowledge society – property (land); financing; technology; and education. In turn their representation in employment, entrepreneurship and research is lower in key sectors of the knowledge society, while women in most of the most countries under study are experiencing inequality of opportunity.

Main findings are that the key factors to promote women's participation in national STI and knowledge systems are: economic status, access to resources, and enabling policies.

It is also clear that more consistent and systematic collection of sex-disaggregated data at the national and international levels is necessary to develop the policies that will allow countries to profit from the underutilized potential of their female population.

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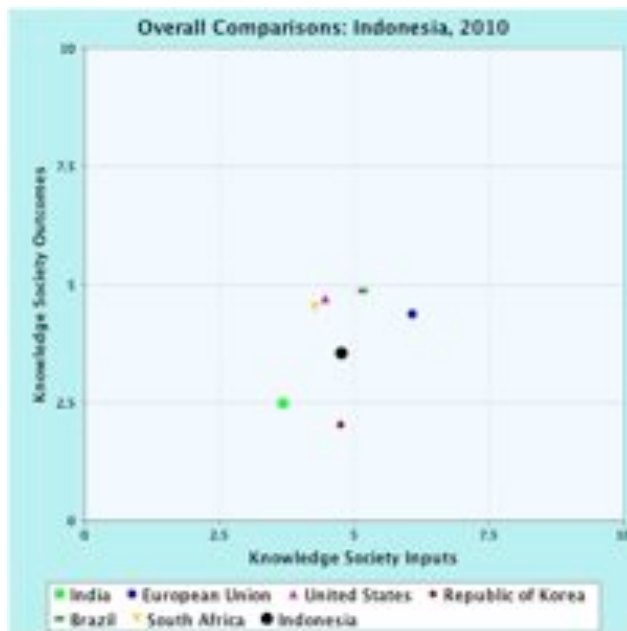
Full papers and key findings are found at www.wisat.org/programs/national-assessments-on-gender-sti/.



Indonesia 2010-11

Key Indicators

| | |
|---|--------------|
| Population | 242,346,000 |
| Females per 100 males | 101 |
| Level of Human Development (HDR) / Rank | Medium - 124 |
| CEDAW signatory | Yes |
| Percentage of GDP allocated to S&T ¹ | 0.07 |



Indonesia is fourth overall, with an enabling policy environment and fourth ranking in most sectors which reflect a steady improvement over the last decade². Of the countries in this study, Indonesia collects the least sex-disaggregated data, with data not available for many of the indicators addressed here. Its positive enabling policy environment gives it a strong potential for improvement, however current levels of economic status, access to resources, agency, health and social status indicate a need to improve the actual status of women in the country.

¹ Battelle 2012 Global R&D Funding Forecast.

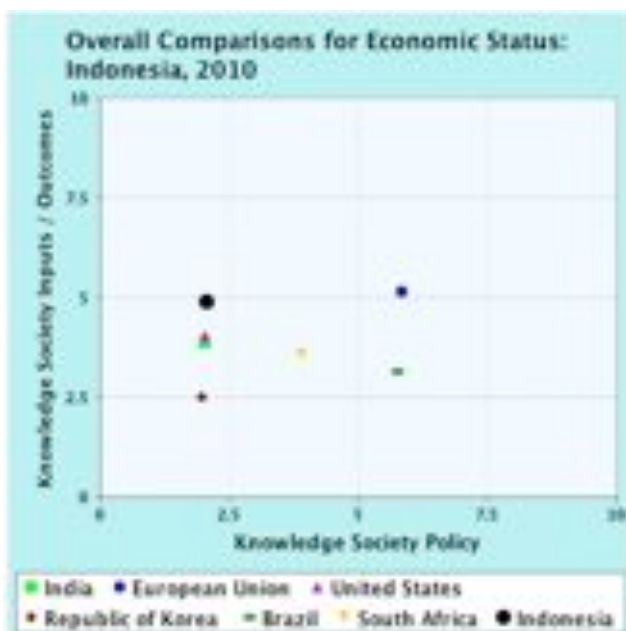
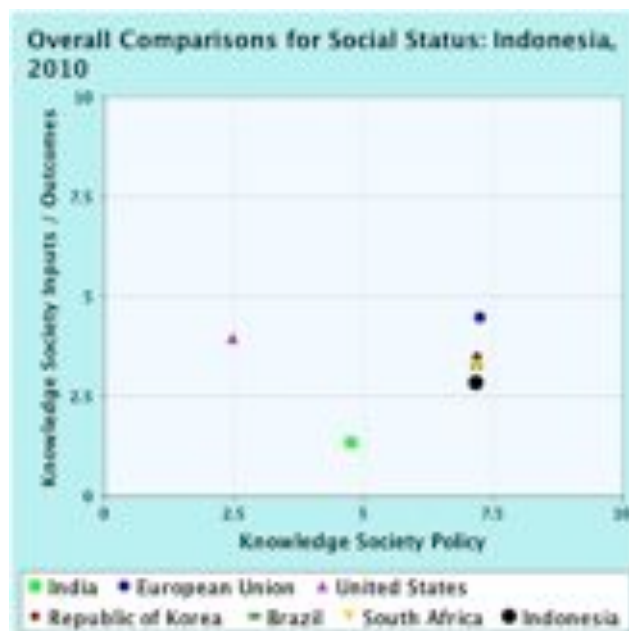
² Lack of data for many indicators means that Indonesia's ranking may change as more data and expert analysis are incorporated into the national assessment.

By Dimension



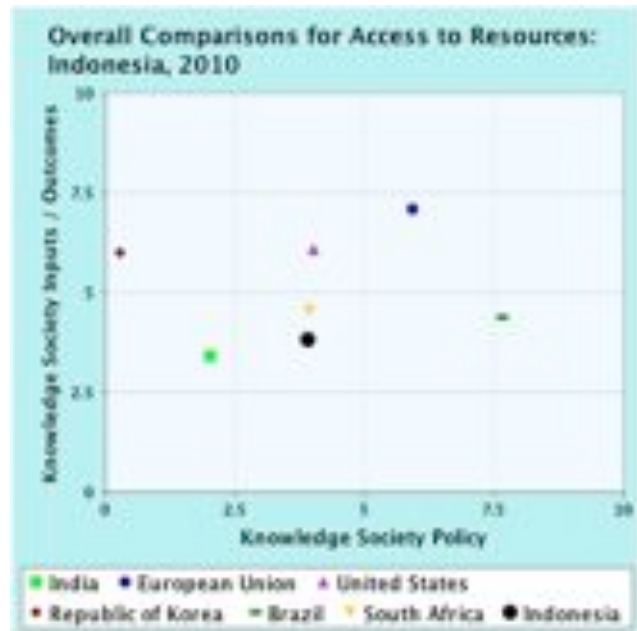
Dimension 1: Health Status. The country shows many positive health trends – life expectancy is increasing, there is free medical treatment for the poor, including childbirth and family planning and improvements in nutrition and availability of clean water. Declines in infant mortality rate and maternal mortality are also seen. The most populous Muslim country in the world, female genital mutilation (FGM) has been practiced in the country for many years. In 2006, the Ministry of Health banned the practice of female genital mutilation (FGM), officially making it illegal for doctors and nurses to perform the procedure. However, in 2010, in view of the continuing practice in the country, the Ministry issued medical guidelines for the procedure.

Dimension 2: Social Status. Less positive trends include a fairly significant increase in violence against women since 2000, and women working more hours than men. A study done by Hermawati (2004) shows that domestic work tends to be fully the responsibility of women and considered as their main role, although they also engage in some economic activities outside of the household. In terms of working hours per day women who also manage productive activities on average tend to work longer than men.



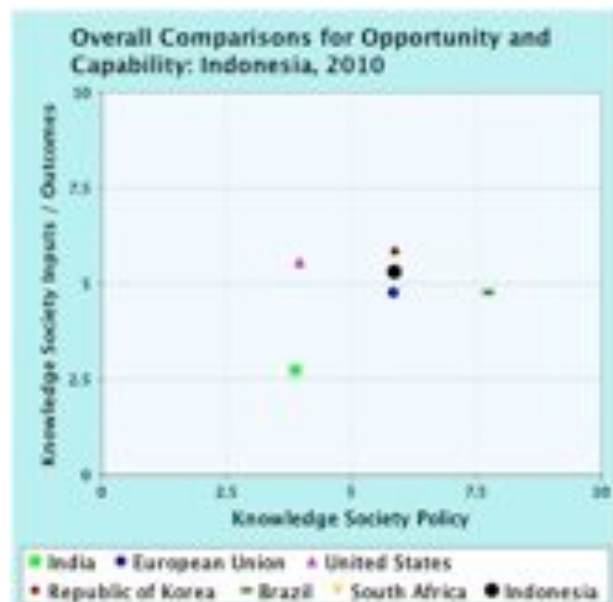
Dimension 3: Economic Status. The percentage of females in the economically active population has decreased from 57% in 2000 to 51% 2009. This is compared to male rates of 84% in 2009. Agricultural labour force rates for both females and males are lower, at 39% for women in 2009 and 40% for men. In 2000, women earned approximately half of men's salaries, a gap which increased to 66% by 2007, although wages for both males and females had increased.

Dimension 4: Access to resources. Indonesia's Civil Code stipulates that men and women have equal ownership rights. Women in Indonesia have full rights concerning access to land, houses and other property, however most communities continue to follow patriarchal traditions and customs that limit women's access to productive resources. Women in Indonesia are also disadvantaged in terms of access to and control over other key livelihood resources. While sex disaggregated data on internet and cell phone use in Indonesia are not collected regularly, data for some years show that women constitute only 20–30% of internet users. Urban areas see a high level of electrification, but households in rural areas continue to depend on traditional fuels to meet their daily needs, requiring the investment of women and girls' time and physical energy to gather and tend.



Dimension 5: Women's agency. While there is a quota for political parties and a range of strategies have been implemented to increase women's engagement with the political process, the representation of females in Parliament and cabinet remains low. Percentages decreased from 13 in the late 80s, although they increased again in 2009 to 18. A slight increase in the number of women government representatives is counteracted by a tendency for women to hold posts that are seen as 'soft' (i.e. relating to women's issues). Female ministers make up 4 out of 34 (11.7%), a decrease from 2009-2010 (14.7%). Of 18 vice ministers, two are female. The representation of women at lower levels of government is slightly higher: 23% of mayors are female, although only 4% of heads of villages are women. Data show that 57.4% of married women aged 15-49 years were using a modern method of contraception in 2007. Adding traditional methods (withdrawal, periodic abstinence and traditional herbs) increases the percentage to 61.4.

Dimension 6: Opportunity and capability: Indonesia's fairly high illiteracy rate of approximately 15% has been decreasing steadily. In terms of educational enrolment, Indonesia is very close to universal enrolment at the primary level, and the gross enrolment ratio of females is at par with males at the secondary level (77%). At the tertiary level, we see a slight gender disparity, with females making up 22% of enrollments and males 24%. Decreasing levels of enrolment at higher levels indicates lack of representation in skilled and professional occupations for the majority in both the male and female populations.





Dimension 7: Enabling Policy Environment. Indonesia has put in place a strong enabling policy environment for gender equality. The 1945 Constitution grants equality to all through the Convention on the Elimination of all Forms of Discrimination Against Women in 1984, while the Agrarian Law of 1960 guarantees the right of women to own land. Equality between men and women has also been consistently emphasized in the Broad Guidelines of State Policy (GBHN) since 1978. The State Ministry for the Empowerment of Women was established to improve the status of women in the family and society and promote their participation in development. Nevertheless, implementation of policy is slow, while a stereotypical views of women, cultural norms, traditional practices and gender-biased interpretation of religious teachings still prevalent in many parts of the country. Women’s rights have not become an integral part of law-making and enforcement.

Dimension 8: Women in Knowledge Society Decision Making. The share of women in decision making and managerial professions in the knowledge society also tends to be low – 22% of legislators, senior officials and managers, 4.5% of corporate Board members, and 25% of decision makers at research institutions. The 2012 percentage of 16.6% female members at the national science academy is double the rate in 2004, and higher than most of the other countries in this sample with the exception of South Africa. However it is still a low rate of representation in a national science decision making body.

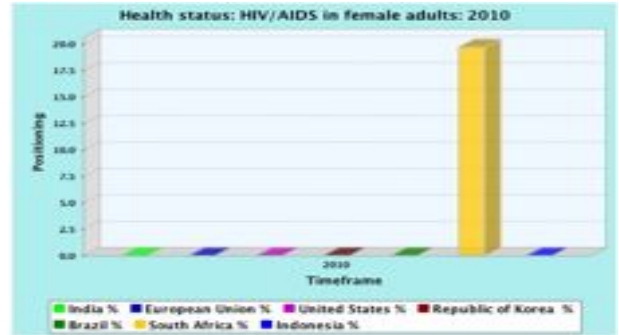
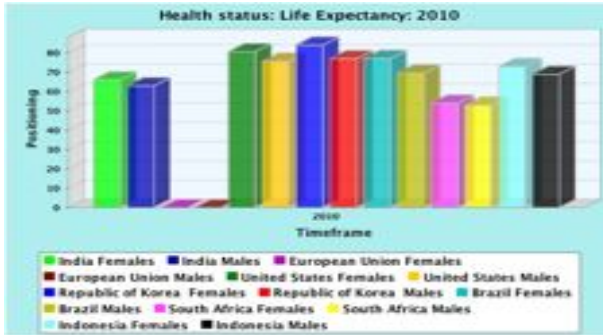


Dimension 9: Women in the knowledge economy. Larger percentages of women occupy administrative and technical support positions relative to managerial and professional positions, with women workers predominantly represented in community and social services. While there is no data on the IT workforce separately, the shares of women among transportation, storage and ICT industry workers from 2002-2010 increased only marginally from 0.04% to 0.08%.

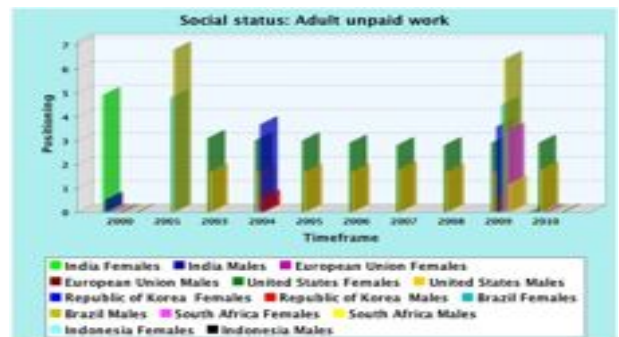
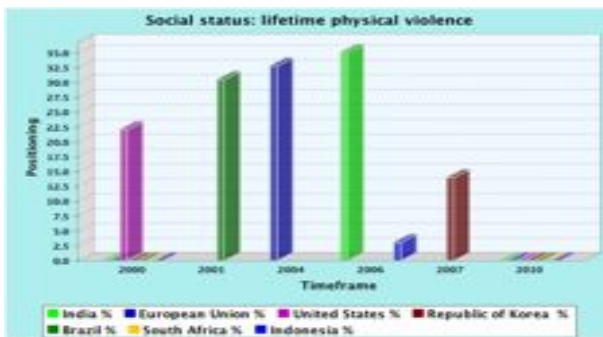
Dimension 10: Women in S&T innovation systems. The share of females as professionals in the knowledge and STI sectors is somewhat higher. Females are approximately at par with males in professional and technical professions and less than half of researchers in government R&D institutions. The representation of females is higher in the private sector, a reverse of the trend in other countries: In the manufacturing industry, females make up 42.7% of researchers, 28.3% of technicians and 29% of administrators/support staff. Female representation in the entrepreneurial sector is higher than in many other countries: 30% of females are owners of businesses employing more than one person, and in 2005, 19.8% of nascent enterprises were run by women. However, it seems that few of these businesses have extended supplier / market networks. According to the IWAPI (Women's Business Association), the percentage of women who run enterprises in a sector value chain is less than 0.1 percent.



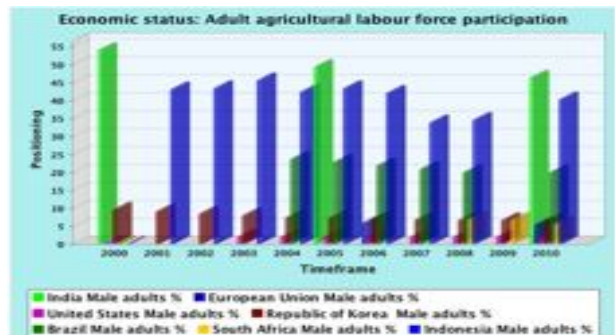
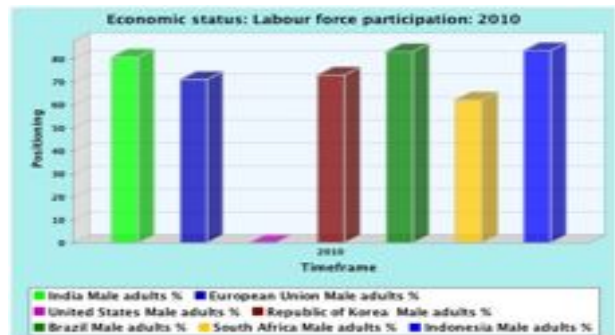
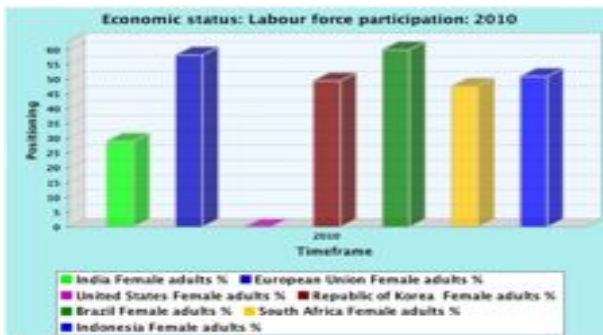
Detailed results by dimension
HEALTH STATUS



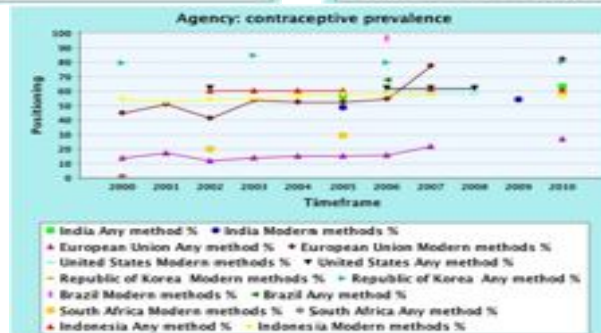
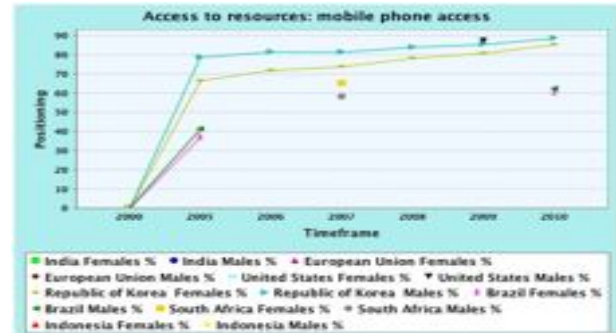
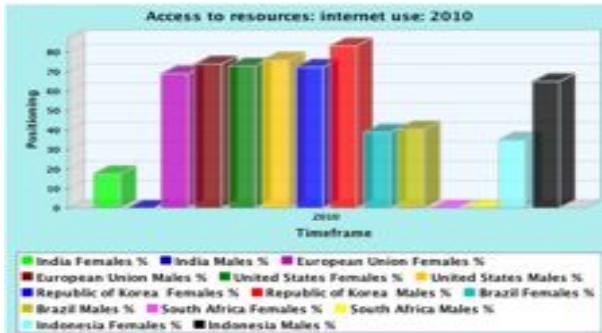
SOCIAL STATUS



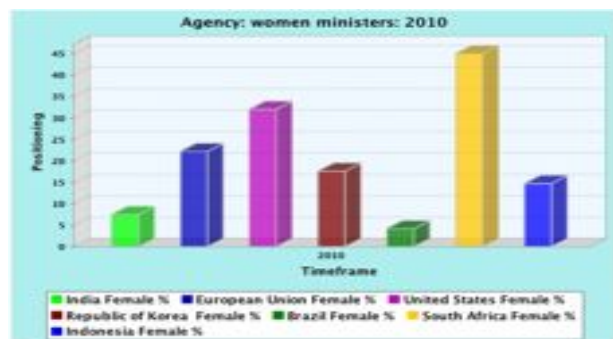
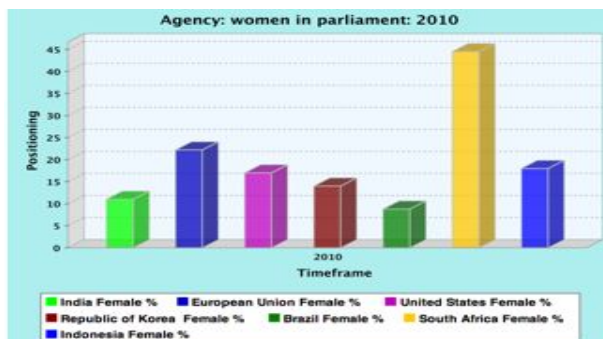
ECONOMIC STATUS



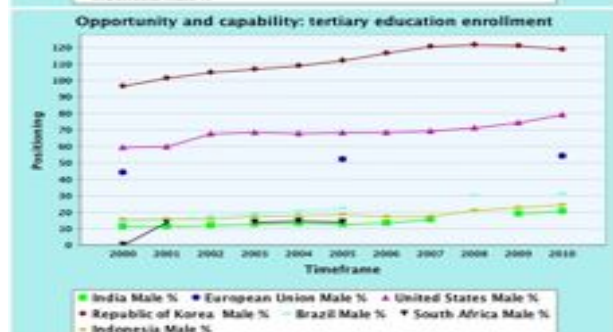
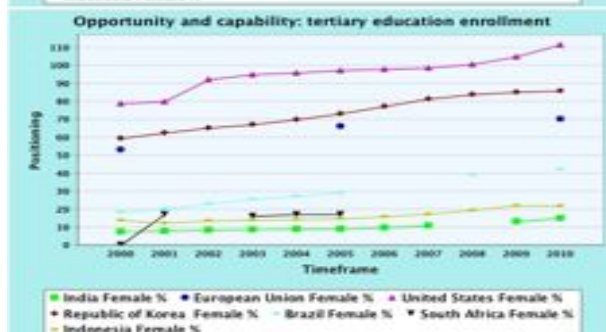
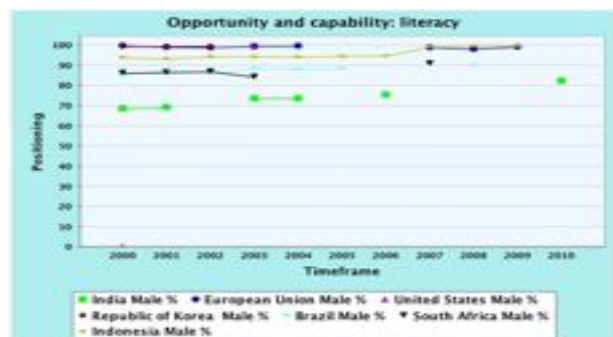
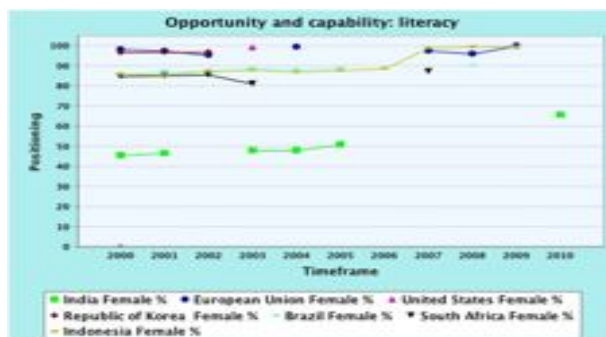
ACCESS TO RESOURCES

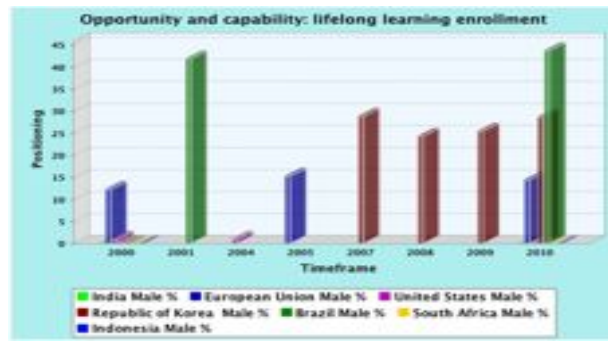
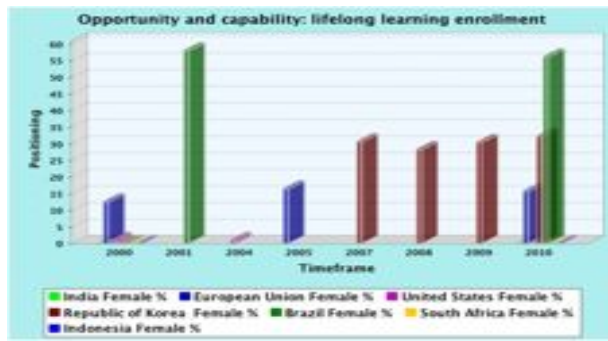


AGENCY

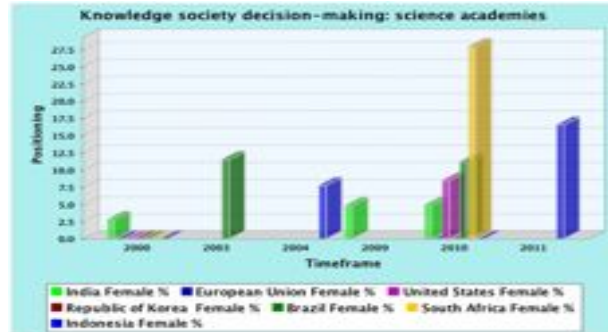
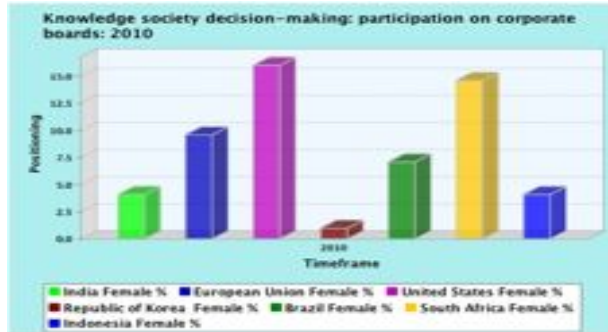


OPPORTUNITY AND CAPABILITY

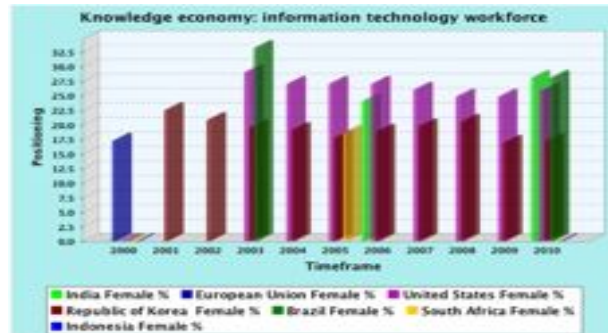
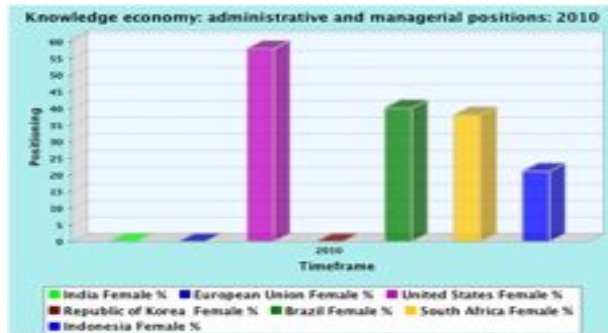




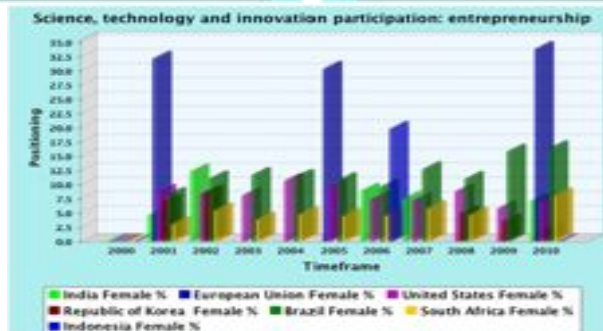
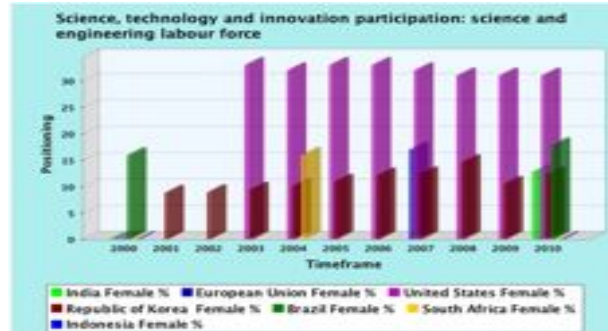
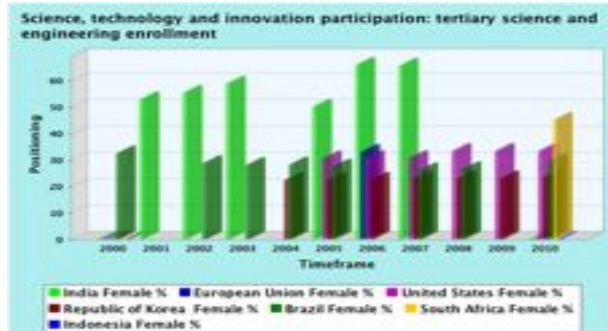
KNOWLEDGE SOCIETY DECISION-MAKING



KNOWLEDGE ECONOMY



SCIENCE, TECHNOLOGY AND INNOVATION PARTICIPATION



Summary Data

