



RESEARCH ARTICLE

POTENTIALS OF ACHIEVING SAUDI VISION 2030 GOAL TO EMPOWER SAUDI WOMEN

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ABSTRACT

Emphasizing the importance of women contribution in growth and development, this paper aim to study and analyze the possibilities of achieving Saudi vision 2030 goals to empower Saudi Women. Descriptive and quantitative analysis using data from higher education statistics, and Saudi Arabian Monetary agency, was done. The study shows that, the number of males and females are more or less equal according to 2015 population data for Kingdom of Saudi Arabia, but when it comes to labor force mismatch between them is observed with higher opportunities for males. The study concludes that, the labor market does not cope with the steady increase in the number of female graduates. Focusing on empowerment of Saudi women, the study proved that contribution of women in business directors, services, and engineering sectors is limited compared to males as the gap widening in both services and engineering sectors. The study found that students enrollment in various engineering specializations is dominated by male. Moreover, females' involvement in technical training, in comparison to males is very limited. On the other hand, the study found that, there is a gradual increase on the number of females joining postgraduate studies recently compare to that previously graduated. Recent data, 2014, indicates Saudi female teaching staff is almost double non Saudis emphasizing empowerment of women with high prediction to achieve 2030 Saudi Vision goals. The study recommends investment in further education for females by providing more opportunities for females to receive Ph.D. degree from local and international Institutions. Moreover, it is recommended to increase number of graduates in specialties that required by labor market and hence increase possibilities to empower Saudi women focusing on that directly affects decision making and strategic planning depending on clear effective swift plans to cope with Saudi Arabia 2030 Vision.

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INTRODUCTION

In 2011 King Abdullah Bin Abdulaziz issued Royal Decrees (Alyum Saudi Newspaper, 2011) among them inclusion of women in all governmental departments by accelerating the creation of women's departments in Agencies that not yet have by implementation of decision mandated (120) dated 12/4/2004 and (60) dated 23/2/2009. His majesty also mandated Feminization and Saudization of industrial jobs that appropriate for Saudi women. Recently, Saudi Minister of labor Dr. Mufrij Alhqbani (Alyamamah Saudi Newspaper, 2015) endorsed that woman's work is acquired right and that creation of suitable jobs for her is one of Ministry of labor priorities. Moreover, reduction of unemployment rate from 11.6% to 7%, and increasing contribution of women in the labor force from

22% to 30% are two declared objectives of Saudi 2030 vision. This could be achieved by the commitments explicitly emphasized in 2030 vision including developing mining sector, and rehabilitation of industrial cities, which include among others, simplifying finance and support of electronic marketing, Kingdom of Saudi Arabia Vision 2030 (Kingdom of Saudi Arabia Vision 2030: <http://vision2030.gov.sa/browsed>). To achieve these goals and commitments joint efforts from all parties including higher education institutions are required leading to effective and positive impact on labor market. This labor market in Saudi Arabia plays significant role in applying Sawada Program to secure job opportunities for Saudis. Sawada Program is applicable since 26/9/1994 under Ministry of labor Decision (50). Nevertheless, rates of unemployment are increasing due to employment opportunities devoted to immigrant workers especially in private sector, Elmulthum and Albisiry (Elmulthum and Albisiry, 2016). This may be attributed to the fact that higher education in Saudi Arabia assign few opportunities to study variable specialties. This

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situation reflects the necessities of depending on immigrant workers in some fields, which constrain the application of Sawada Program. Albahusein (2006) investigated the skills required for the job market in private sector in Saudi Arabia and the ability of higher education curriculum in providing these skills. According to his results, 78.8% of survey sample consider the curriculum is not suitable for provision of the required skills. Based on his results, the skills required by the labor market include; sincerity and hard work, discipline, ability to work in teams, mastery of English Language and Information Technology. On the other hand, Elmulthum and Adam (2010) concluded that, however women education's is following an upward trend, availability of employment opportunities does not keep pace with increased educational chances for females. Furthermore, women have only very rare chances to decide upon vital issues related to them, their families or policy making and that is because of limited opportunities to assign them for senior positions. In Saudi Arabia, specialty offered for females is to some extent limited. Elsayed and Abdelmagid (2016) in their study recommend more Engineering specialty for females. Although Saudi females are contributing significantly on both Medical and Education fields, her contribution at decision making levels are limited. Moreover, she is still lagging in many educational specialties such as engineering. In Saudi Arabia, there is 24 Governmental universities among them there is only one engineering program offered for females (Elsayed and Abdelmagid, 2016). Biomedical engineering program is a new program offered for females at only two universities. In 2010 Dammam University accepted females for the biomedical engineering program (<http://www.uod.edu.sa/en/colleges/college-of-engineering/programs/bachelor-of-science-in-environmental-engineering>), while King Faisal University enrolled females two years later (<https://apps.kfu.edu.sa/ishraqatkfu/stratgic-plan-2020/Book/samples/magazine/index.html#page/69>). Both universities are in the Eastern Region of Saudi Arabia.

They found that, Environmental Engineering program for females was never offered in Saudi. Such specialty is quite convenient for females due to direct connection with planning and decision-making. Unless more opportunities are given for females the contribution of females in either labor market or decision making will always be remarked as unsatisfactory and below prophecies of 2030 vision. This research focuses on studying and analyzing the potentials of achieving the goals of Saudi Vision 2030 for empowerment of Saudi Women.

MATERIALS AND METHODS

Secondary data was gathered from various governmental agency. Data regarding university graduates and staff members at higher education institution was obtained from Saudi Ministry of Higher Education (2016). Moreover, data from Saudi Arabia Central Department of Statistics and Information (2016), Ministry of Economics and Planning and Saudi Higher Education Statistics Center was gathered. In addition to data obtained from Saudi Arabian Monetary agency which focuses on unemployment rates and labor force. Descriptive and quantitative statistics analysis were employed. Correlation coefficients between number of male and female graduates and the unemployment rate were estimated. Graphs and tables were constructed, analyzed and discussed to assess possibilities of 2030 Saudi Vision to empower Saudi women.

RESULTS AND DISCUSSION

Figure 1 below shows 2015 population in Kingdom of Saudi Arabia by Gender. Although, the number of males and females are more or less equal, when it comes to labor force mismatch between them is observed with higher opportunities for males. Figures 2 and 3 show Saudi labor force by sex in private and public sector 2005-2015 respectively. On the other hand, Figure 4 below shows that, non-Saudi workers dominates the labor market in private sector. While Figure 5 indicates that, Saudis dominates the labor market in public sector. Both Figures (4&5) indicated consistency with lower participation of females in both sectors. This indicates that, the labor market does not cope with the steady increase in the number of graduated female shown in Figure 6 below. The figure shows that, number of female students graduated from higher education institutions in Saudi Arabia significantly increased during the period 2000 to 2013. Consequently, creating additional employment opportunities -for females would help in achieving Saudi 2030 vision goal to reduce unemployment rate from 11.6% to 7% and increasing contribution of small and medium investments by 35% which are declared objectives of Saudi Vision 2030. Hence, this would have a positive impact on employment rate for Saudis emphasizing females.

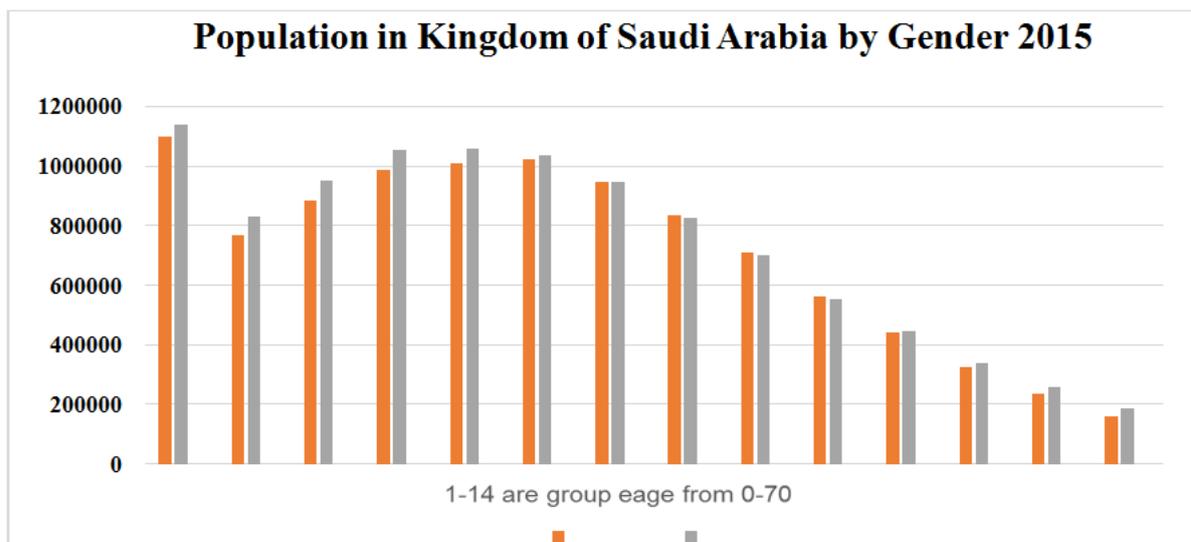
On the other hand, Figure 7 below shows that, the unemployment rate of females is far below that for males. Average unemployment rate in Saudi Arabia for females and males during this period is equal to 26.65 and 7.15 respectively. Creating employment opportunities would give the increased number of female graduates shown by figure 6 prosperous chances of getting jobs and hence, reduction of unemployment rate for females with more predictions for empowerment. Both Figures, 6 and 7, predict high chance for achieving 2030 Saudi Vision goals to increased contribution of women in Saudi labor force that reflects positively on increasing the chance of empowerment of women.

Correlation coefficient between female graduates and unemployment rate for females was estimated to be 0.92 indicating very high positive correlation. Hence, steady increasing in graduated females further increases unemployment rate, a sign of few employment opportunities available for females. In contrast, negative correlation between male graduates and unemployment rate estimated at -0.49 is an indication of high opportunities to get jobs and hence significantly reduce the unemployment rate for male graduates. Focusing on empowerment of Saudi women, selected jobs were studied. Figures 8, 9, 10 and 11, depict Saudi employment in business directors, services, and engineering sectors respectively. These figures proved that females have lower employment opportunities as compared to males in all selected sectors with the gap widening in both services and engineering sectors. However, in business directors the gap is decreasing, which could be attributed to the increase of number of female graduates from relative multi-disciplines. As (Elmulthum and Elbisiry, 2016) found that, the highest average proportion of graduates during the period from 2000-2013 was Humanity Sciences specialties graduates. While the lowest proportion was from industrial and architectural engineering specialties. The rate of female employment as percentage of total employment in the three selected sectors, mentioned previously, confirms previous results.

Table 1. Engineering Schools at Varies Saudi Higher Education Institutes 2016

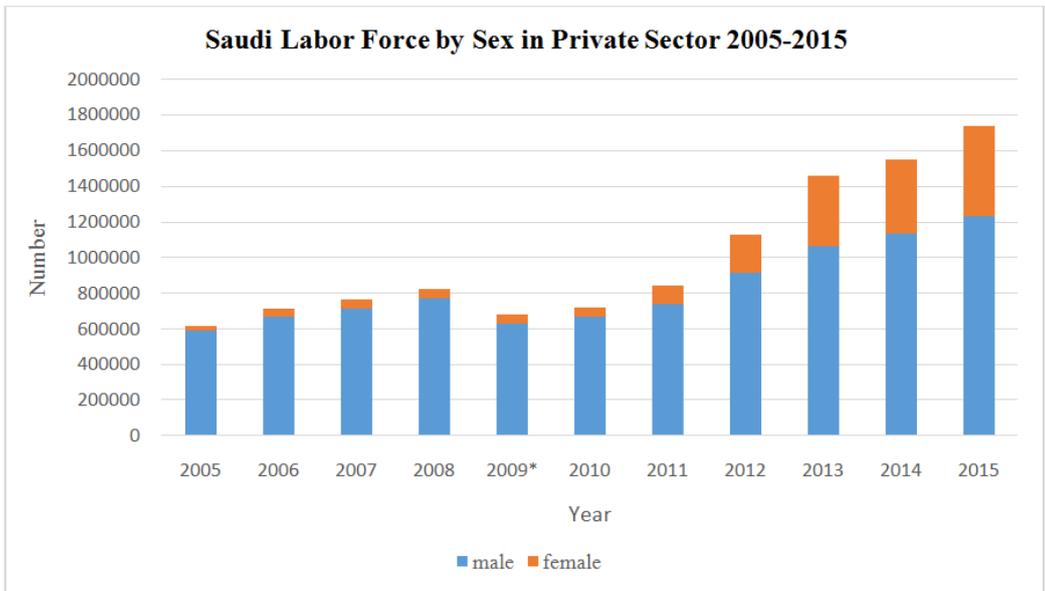
University	Eng. Dept.	Gender	Link
Al Baha	Electrical, Civil, Mechanical, Computer & Architecture	Male	http://portal.bu.edu.sa/web/faculty-ofengineering
Al Baha Private College	Computer, Electrical, Electronics and communications	Male Females	http://bpcs.edu.sa/
Al Jouf	Electrical, Civil & Mechanical	Male	www.ju.edu.sa/colleges/eng
Al- Qassim	Electrical, Civil & Mechanical	Male	www.qec.qu.edu.sa/
Alfaisal	Mechanical, Industrial, Electrical, Software & Architecture	Male	http://www.alfaisal.edu/ar
Al-Imam Muhammad Ibn Saud Damman	Electrical, Civil, Mechanical Chemical & Architecture Environmental, Construction and Biomedical	Male Female	http://www.imamu.edu.sa www.engineering@ud.edu.sa
Dar Al- uloom	Architecture, Graphics and Interior Design	Male	http://dau.edu.sa/ar/colleges-ar/caddar/cadd-undergraduate
Effat	Electrical, Computer and Information systems & Architecture	Female	effatuniversity.edu.sa/Arabic/Academic/College-of-Engineering
Gazan	Electrical, Civil, Mechanical Chemical, Industrial & Architecture	Male	www.colleges.jazanu.edu.sa/
Hail	Electrical, Civil, Mechanical & Chemical	Male	www.uoh.edu.sa
King Abdul-Aziz	Electrical, Civil, Mechanical Chemical, Material, Industrial, Mining, nuclear and Computer	Male Female	http://engineering.kau.edu.sa
King Fahad for Petroleum and Minerals	Information Systems, Electrical, Civil, Mechanical Chemical, Petroleum & Aviation	Male	http://www.kfupm.edu.sa/ces
King Faisal University	Electrical, Civil, Mechanical Chemical, Material & Biomedical		https://www.kfu.edu.sa/ar/Colleges/AhsaEngineering/Pages/Home-new.aspx
King Khalid	Electrical, Civil, Mechanical Chemical & Industrial	Male	www.kku.edu.sa/male_engineering
King Saud	Electrical, Civil, Mechanical Chemical, Industrial, Petroleum and natural gas, Telecommunications and Electronics	Male	http://engineering.ksu.edu.sa
Najran	Electrical, Civil, Mechanical Chemical, Industrial & Architecture	Male	portal.nu.edu.sa/web/engineering-college
Northern Border	Electrical, Civil, Mechanical Chemical, Industrial & Material	Male	http://www.nbu.edu.sa/Colleges/Arar/Pages/CollegeOfEngineering
Prince Muhammad Bin Fahad	Electrical, Civil, Mechanical & Interior Design	Male	www.pmu.edu.sa
Prince Sultan	Management, communications and networking	Male	http://www.psu.edu.sa/colleges/Engineering
Prince Sultan Bin Fahad	Electrical, Civil, Mechanical & computer	Male	www.fbsu.edu.sa
Qassim private College	Computer	Male	www.qc.edu.sa/NewWeb/index.php/colleges/computer-eng
Tabuk	Electrical & Civil	Male	www.ut.edu.sa/
Taibah	Electrical, Civil, Mechanical Chemical, Industrial & Architecture	Male	www.taibah.edu.sa
Taibah (Yanbu)	Electrical, Mechanical, Computer and information systems	Male	www.taibahu.edu.sa
Taif	Electrical, Civil & Mechanical	Male	web.tu.edu.sa/tu/ar/college-ofengineering
Umm Al- Qura	Electrical, Civil, Mechanical & Islamic Architecture	Male	http://uqu.edu.sa/engineeringarchitecture

Source: Authors presentation based on Saudi Ministry of Higher Education statistics



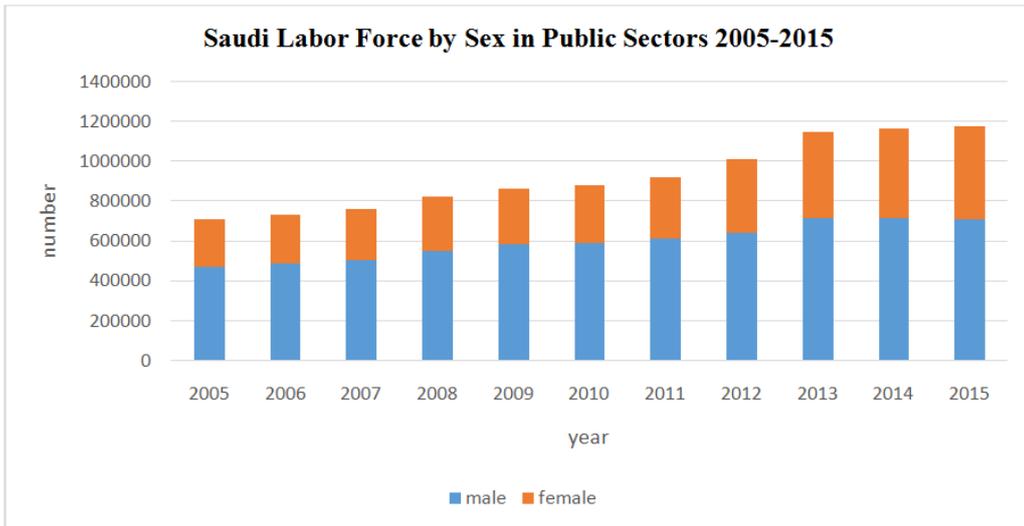
Source: Authors presentation based on Saudi Arabia Central Department of Statistics and Information, Ministry of Economics and Planning

Fig.1. 2015 Kingdom of Saudi Arabia Population by Gender



Source: Authors presentation based on Saudi Arabian Monetary agency

Fig.2. Saudi labor force by sex in private sector in Saudi Arabia 2005-2015



Source: Authors presentation based on Saudi Arabian Monetary agency

Fig.3. Saudi Labor force by sex in public sectors 2005-2015



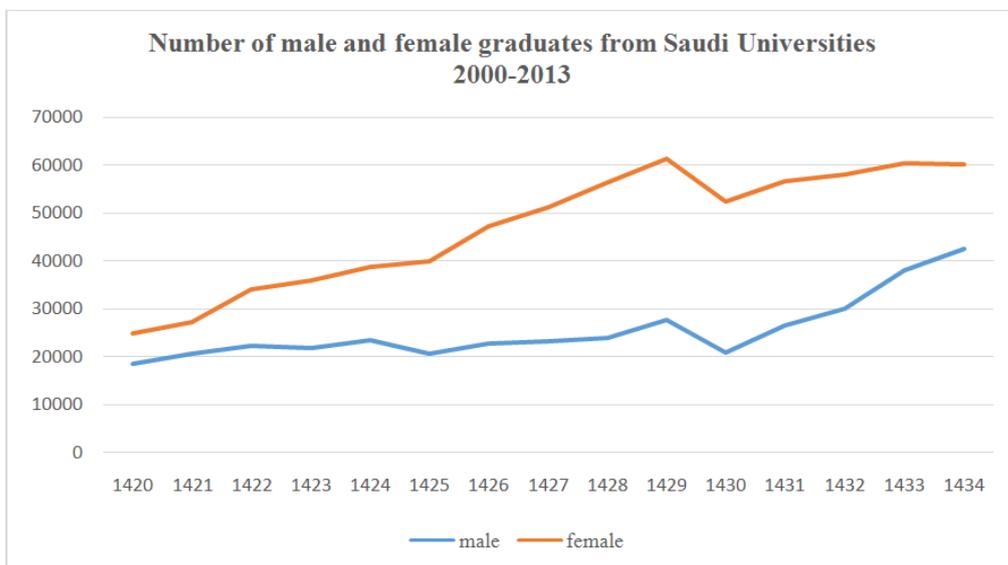
Source: Authors presentation based on Saudi Arabian Monetary agency

Fig.4. Labor Force in Saudi Arabia Private Sectors 2005-2015



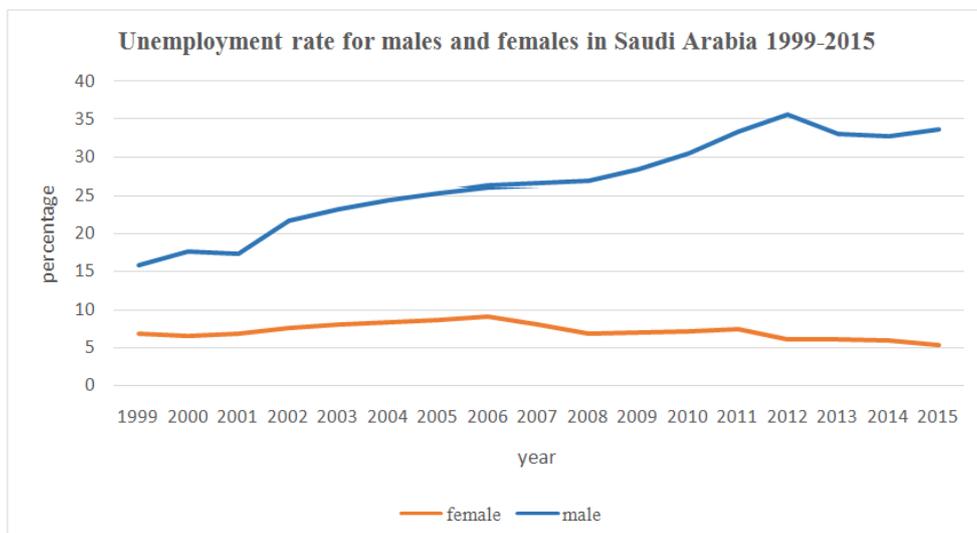
Source: Authors presentation based on Saudi Arabian Monetary agency

Fig.5. Labor Force in Saudi Arabia Public Sector by Sex 2005-2015



Source: Authors presentation based on Saudi higher education statistics

Fig.6. Number of Male and Female Graduates from Saudi Universities 1420-1234



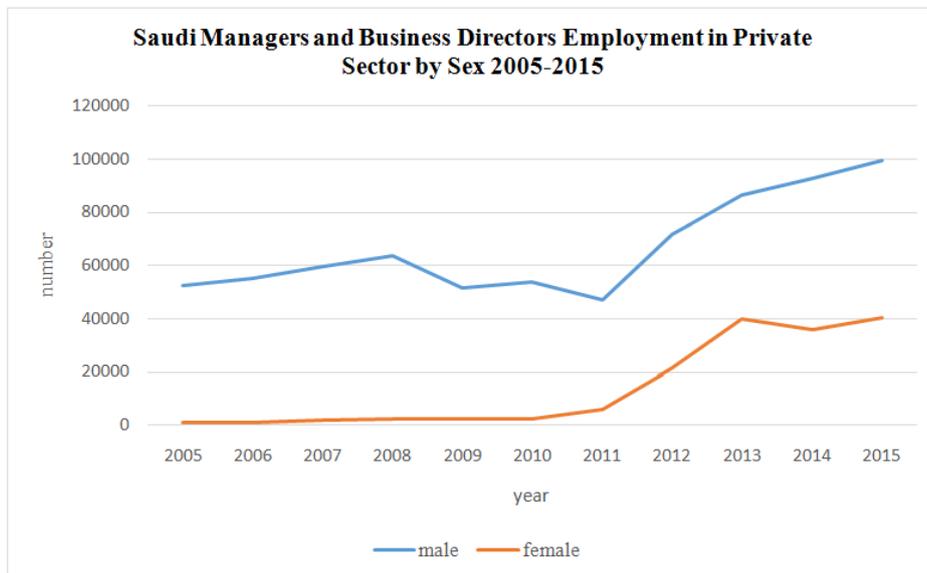
Source: Authors presentation based on Saudi Arabian Monetary agency

Fig.7. Unemployment Rate for Males and Females in Saudi Arabia 1999-2015



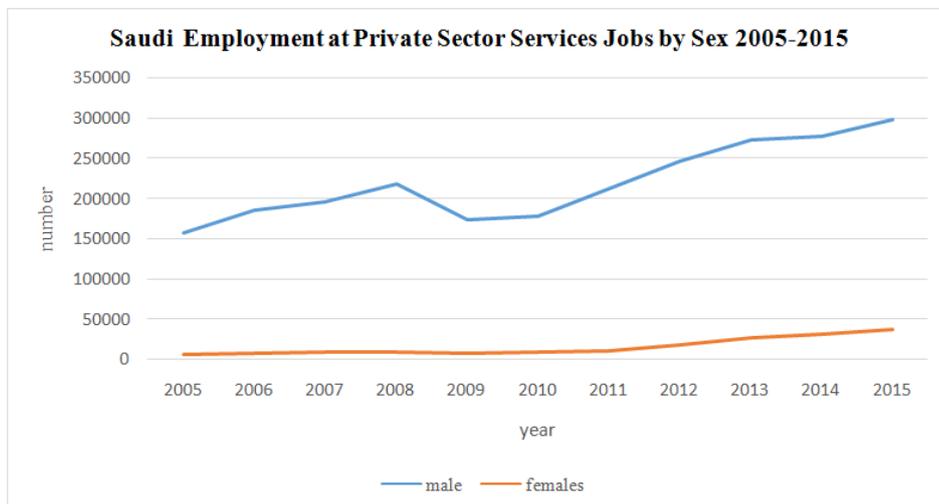
Source: Authors presentation based on Saudi Arabian Monetary agency

Fig. 8. Rate of Female Employment in Selected Jobs in Saudi Arabia 2005-2015



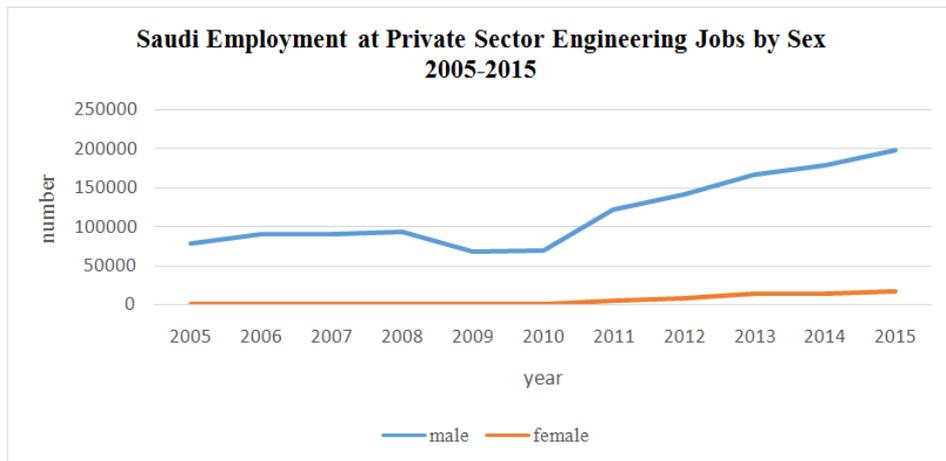
Source: Authors presentation based on Saudi Arabian Monetary agency

Fig. 9. Saudi Managers and Business Directors Employment by Sex in Private Sector 2005-2015



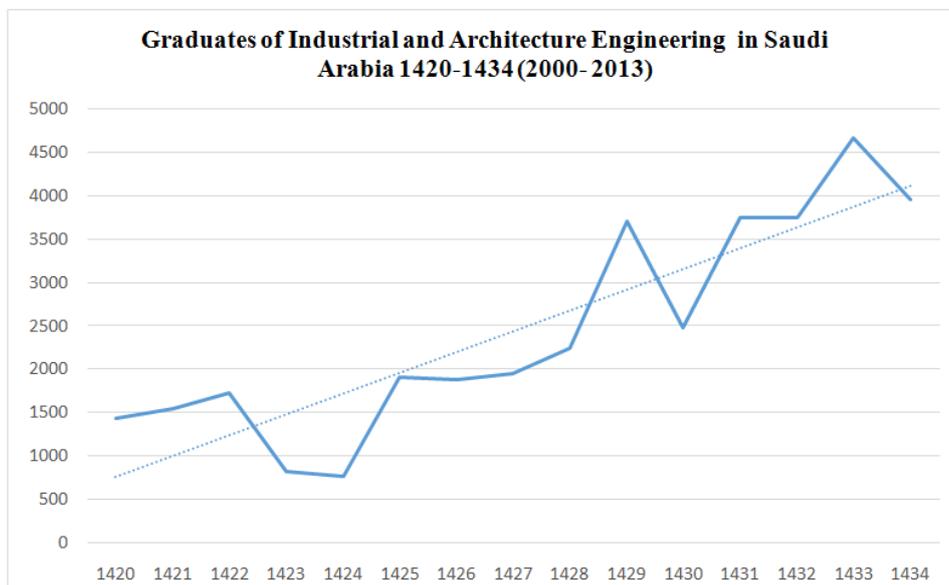
Source: Authors presentation based on Saudi Arabian Monetary agency

Fig. 10. Saudi Employment at Private Sector Services Jobs by Sex 2005-2015



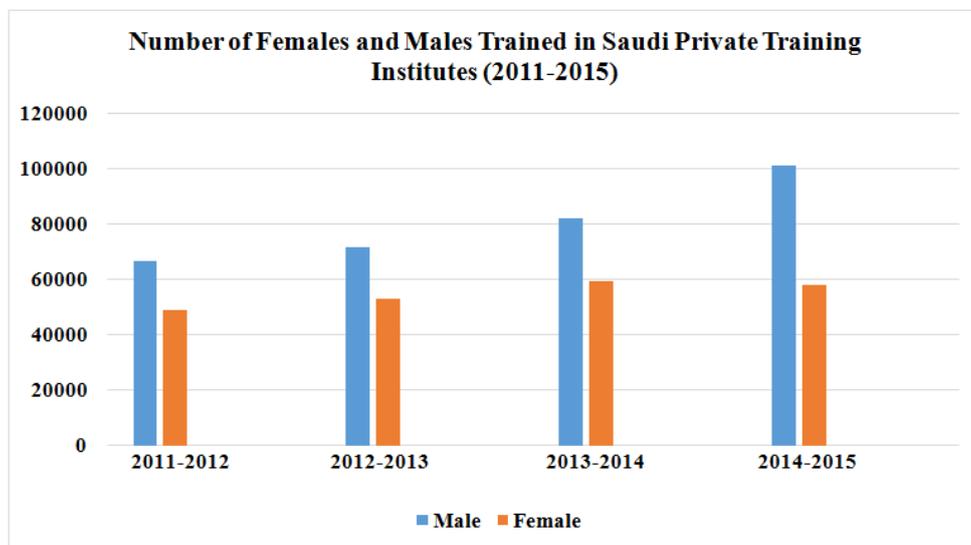
Source: Authors presentation based on Saudi Arabian Monetary agency

Fig. 11. Saudi Employment at Private Sector Engineering Jobs by Sex 2005-2015



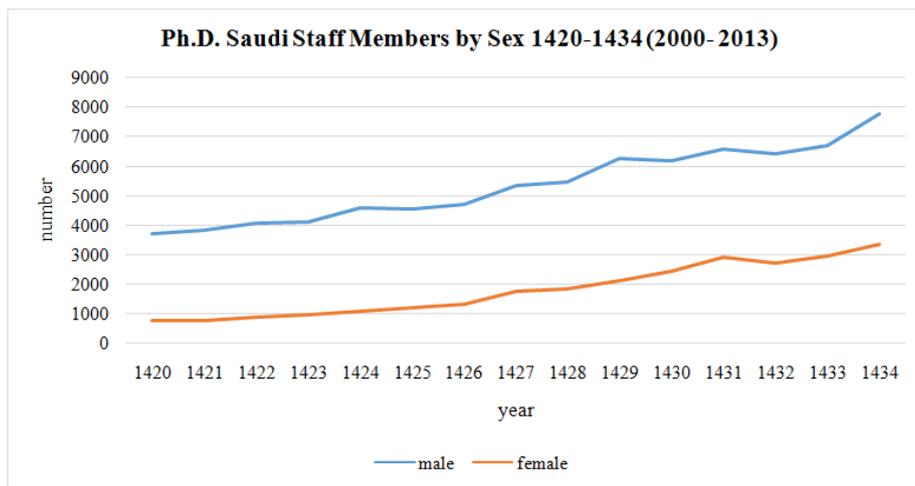
Source: Authors presentation based on Saudi higher education Statistics

Fig. 12. Graduates of Industrial and Architecture Engineering in Saudi Arabia 2000- 2013



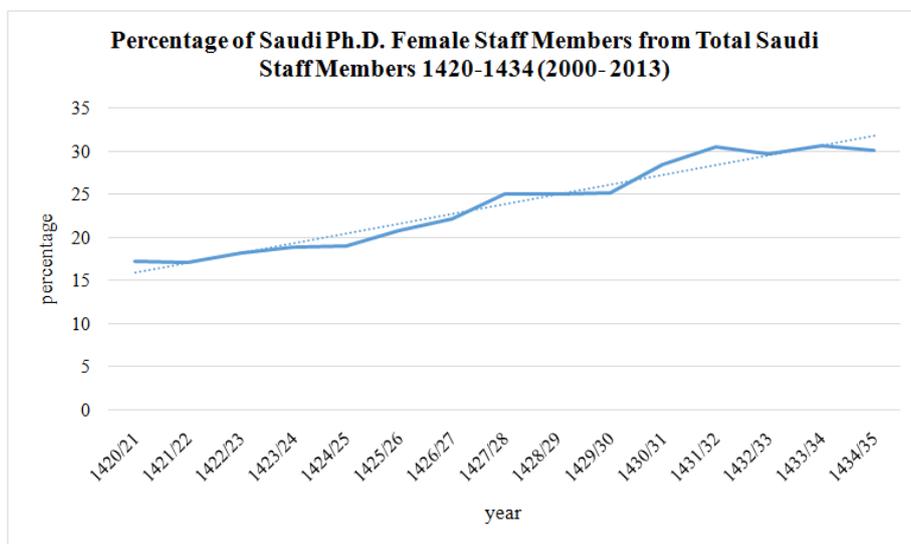
Authors presentation based on Saudi higher education Statistics

Fig. 13. Number of Females and Males Trained in Saudi Private Training Institutes 2011-2015



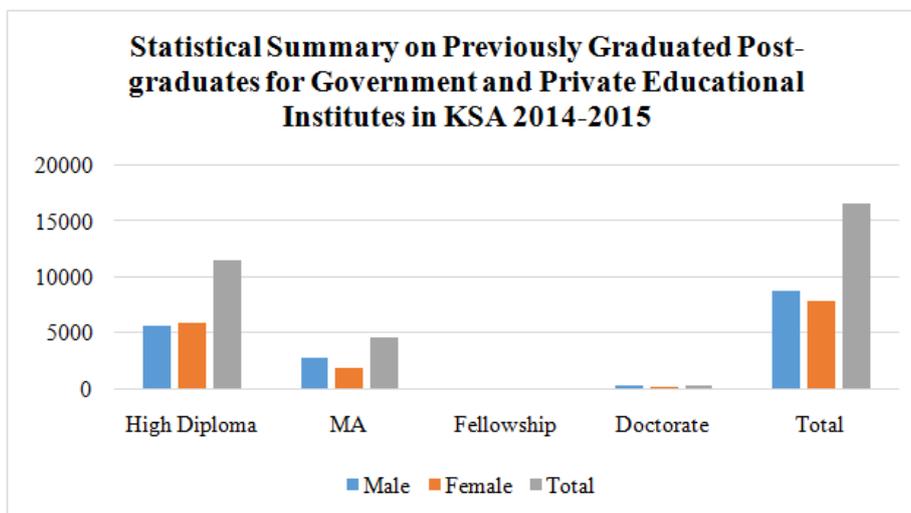
Source: Authors presentation based on Saudi higher education Statistics

Fig.14. Ph.D. Saudi Staff Members by Sex 2000- 2013



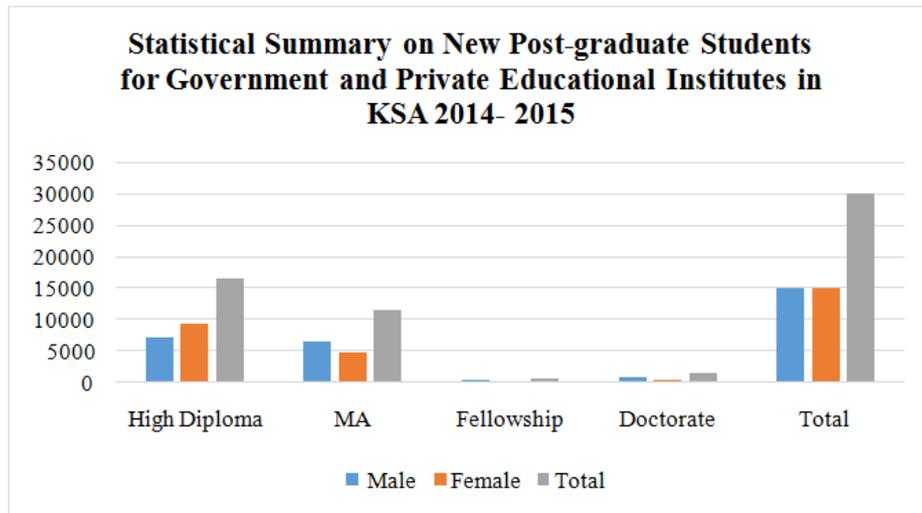
Source: Authors presentation based on Saudi higher education Statistics

Fig.15. Percentage of Saudi Ph.D. Female Staff Members from Total Saudi Staff Members 2000- 2013



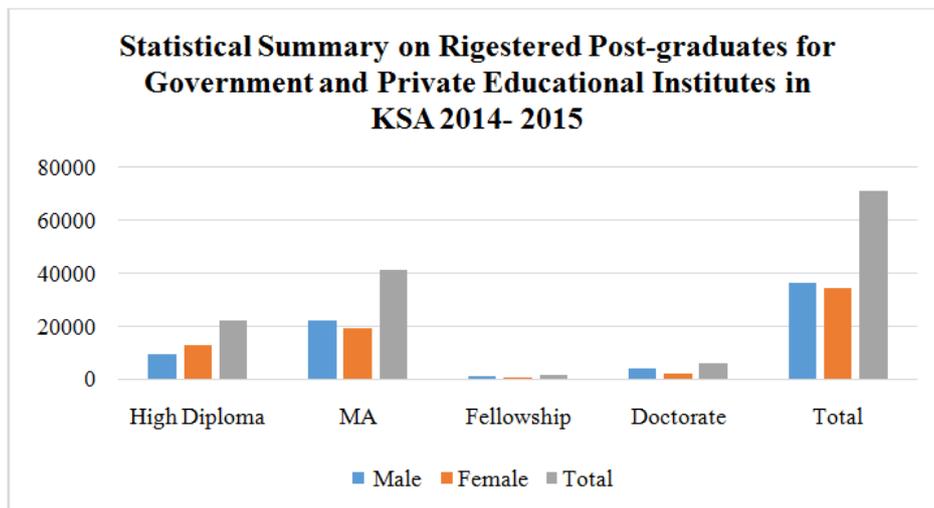
Source: Saudi Higher Education Statistics Center

Fig.16. Statistical Summary on Previously Graduated Post-graduates for Government and Private Educational Institutes in KSA 2014-2015



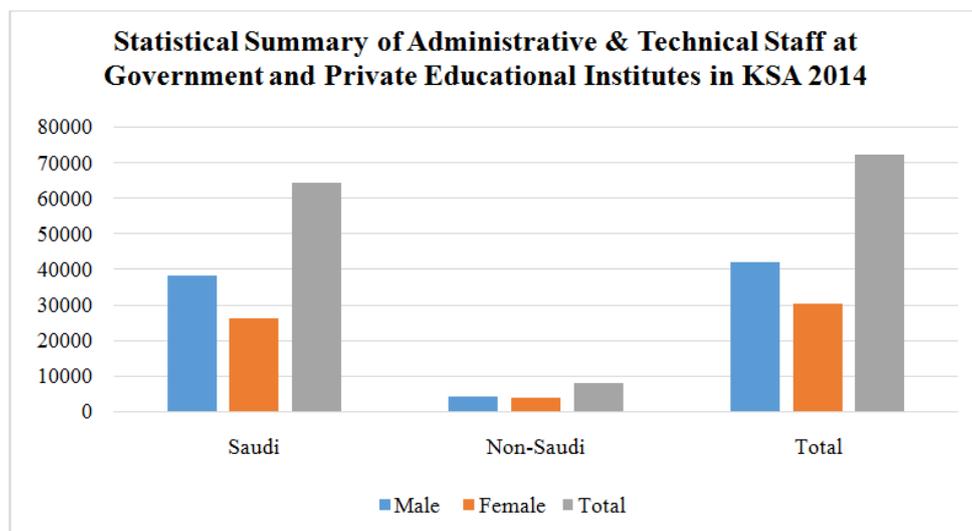
Source: Saudi Higher Education Statistics Center

Fig.17. Statistical Summary on New Post-Graduate Students for Government and Private Educational Institutes in KSA 2014- 2015



Source: Saudi Higher Education Statistics Center

Fig.18. Statistical Summary on Registered Post-graduates for Government and Private Educational Institutes in KSA 2014- 2015



Source: Saudi Higher Education Statistics Center

Fig.19. Statistical Summary of Administrative and Technical Staff at Government and Private Educational Institutes in KSA 2014

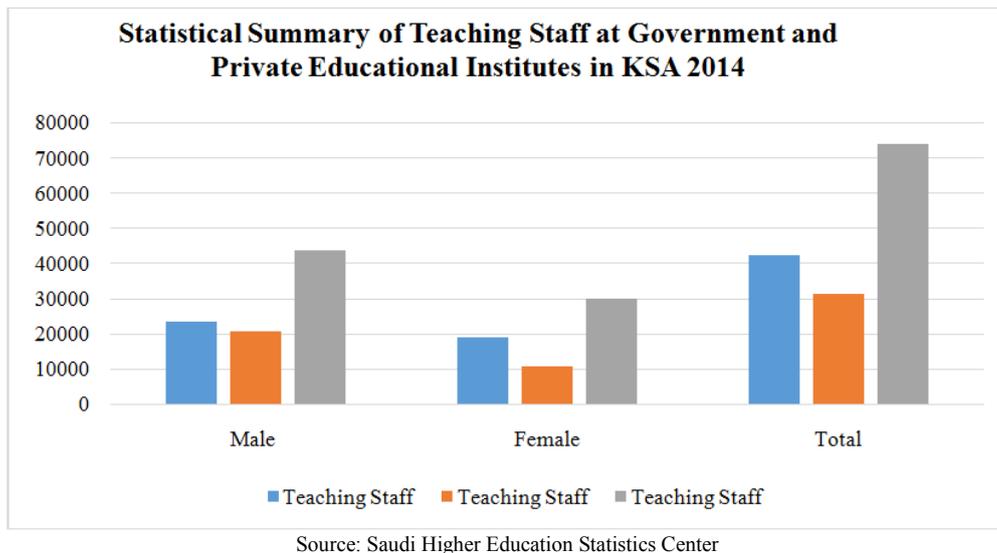


Fig.20. Statistical Summary of Teaching Staff at Government and Private Educational Institutes in KSA 2014

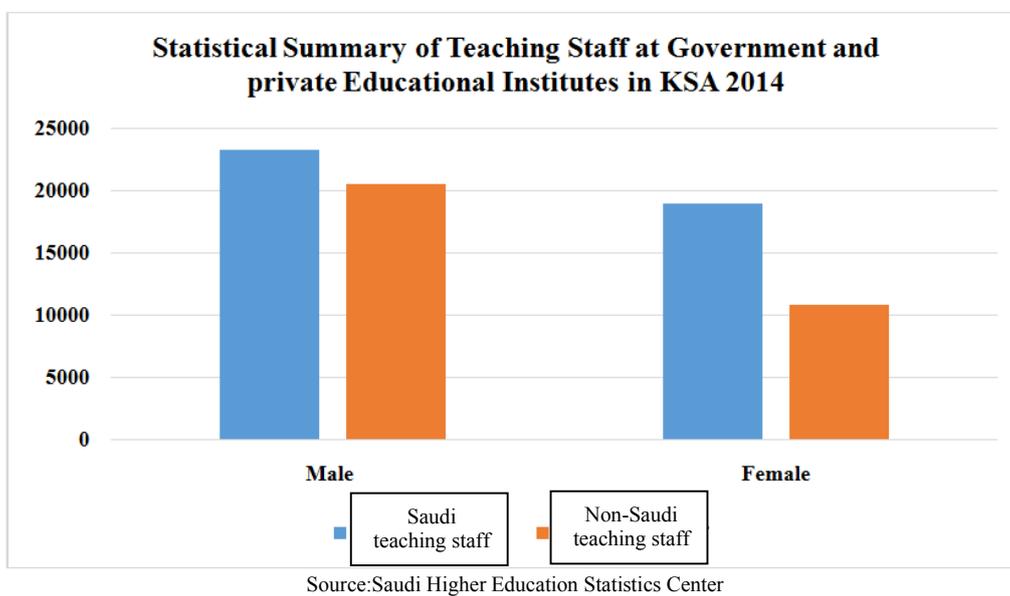


Fig.21. Statistical Summary of Teaching Staff at Government and private Educational Institutes in KSA 2014

Figure 12 indicated that the number of graduates from industrial and architecture engineering is increasing during the period 2000-2013, however, students enrollment in these engineering specializations is dominated by male students which is a further confirmation of very limited opportunities available for females. Results related to engineering sector coincides with the fact of very limited opportunities available for females to study engineering. Data gathered from Ministry of Higher Education (2016) shows that, there is 26 Governmental universities among them there is only one engineering discipline offered for females. Biomedical engineering program is a new program offered for females at only two governmental universities. Dammam University accepted females for the biomedical engineering program in 2010, while King Faisal University in 2013. Table 1 above shows another two colleges offer engineering programs for females located in the Western part of Saudi. King Abdullah University of Science and Technology is offering engineering programs for male and female at same time and site, while Effat Private College is offering Engineering programs for females only.

Moreover, technical training is quite limited for females. Technical and Vocational Training Institutes in Kingdom of Saudi Arabia are Governmental Vocational Training Institutes, Strategic Partnerships Institutes and National Private Training Institutes. Females are involved only in training provided by National Private Training Institutes. Fig. 13 below shows number of females and males trained at private training institutes during the period 2011-2015. The figure indicates that females' involvement in technical training, in comparison to males, is very limited. Hence, more chances for employment are available for males especially in private sector where skill assigned a high value. This situation is further confirmed by Figures 2 and 3 mentioned previously, where higher employment opportunities are available to Saudi males at the expense of females in both private and public sectors with significant difference in the private sector.

Qualified female graduates have a tangible impact on Saudi society and hence greatly contribute to achieving 2030 Saudi Vision goal to increase contribution of females in the labor market and hence empower them. Fig. 14 shows employment

opportunities for Saudi female staff holding Ph.D degree in higher education institution during the period 2000-2013 steady increase, though, far below male staff members. Nevertheless, Fig. 15 below shows the percentage of Saudi Ph.D. female staff members from total Saudi staff members, which is still far below male staff members with an average of 23.8%. Figures 16, 17 and 18 below summarized the stages of post-graduate for government and private educational institutes in KSA from 2014- 2015. They show that, there is a gradual increase on the number of females joining postgraduate studies recently compared to previous graduates. Which emphasize the empowerment of women with high prediction to achieve 2030 Saudi Vision goals. Figures 19, 20 and 21 below confirm considerable opportunities given to females to get higher education, and hence greater chances to significant contribution to labor market, which could lead to achieving Sawada objectives. These recent data, 2014, indicates that the Saudi female teaching staff is almost double non-Saudis, while administrative and technical Saudi females dominate the offered jobs with negligible contribution of non-Saudi females.

Investment in further education for females by providing more opportunities to receive Ph.D. degree from local and international institutes is expected to have a significant impact on quantity and quality of female postgraduates. Hence, they would have great opportunities in the labor market and reflect positively in narrowing the gap between the output of higher education and labor market which is one of the commitments declared by Saudi Vision 2030 and lead to empowerment of more females.

Conclusion

The study shows that, the number of males and females are more or less equal according to 2015 population data for Kingdom of Saudi Arabia, but when it comes to labor force mismatch between them is observed with higher opportunities for males. The study concludes that, the labor market does not cope with the steady increase in the number of female graduates. Focusing on empowerment of Saudi women, involvement of Saudi women in selected jobs were studied. The study proved that contribution of women in business directors, services, and engineering sectors is limited compared to males as the gap widening in both services and engineering sectors. However, in business directors the gap is decreasing, which could be attributed to the increase of number of female graduates from relative multi-disciplines. The study found that male students dominate enrollment in various engineering specializations. Moreover, females' involvement in technical training, in comparison to males is very limited. Although the involvement of females in variable specialty is increasing, the pace is very slow in some disciplines such as Engineering. Consequently, creating additional employment opportunities for females soon would help in achieving 2030 Saudi Vision goal to reduce unemployment, and increase contribution of small and medium investments. On the other hand, the study found that, there is a gradual increase in the number of females joining postgraduate studies recently compare to that previous graduates. As more chances given to females to get higher education opportunities, more chances to contribute to labor market, hence enhance the application of Sawada program. Based on the results, using recent data, female teaching staff is almost double non-Saudis emphasizing prosperous opportunities of women empowerment in Saudi Arabia with high prediction to achieve 2030 Saudi Vision

goals. The study recommends investment in further education for females by providing more opportunities for females to receive Ph.D. degree from local and international institutes to give significant impact on quantity and quality of female postgraduates. It is correspondingly recommended to focus on development and rehabilitation to local further studies that lead to ph. D. degree and contribute significantly on high rates of employment among females. Hence, they would have great opportunities in the labor market and reflect positively in narrowing the gap between the output of higher education and labor market as one of the commitments acknowledged by 2030 Saudi Vision. Moreover, it is recommended to increase number of graduates in specialties that required by labor market and expected to be generated during implementation of 2030 Saudi Vision predicting high chance to achieve the vision. Furthermore, focusing on involvement of more females in different specialties that directly affect decision-making and strategic planning depending on clear effective swift plans to cope with Saudi Arabia 2030 Vision.

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