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COMPARISON OF EDUCATIONAL AND SOCIO-ECONOMIC CHARACTERISTICS OF AGRICULTURE STUDENTS BY GENDER AT UNIVERSITY OF AGRICULTURE, FAISALABAD-PAKISTAN

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ABSTRACT

The research based on cross-sectional data was conducted to develop a comprehensive characterization of the situation of students in higher education. In this regard, analysis of differences in various gender-related socio-economic characteristics was conducted that may motivate future systematic annual analysis of tertiary education demographics. To address the purpose of the study, first of all, the University of Agriculture, Faisalabad was purposively selected as a study population. Next, primary data was collected through well designed and pretested questionnaire from randomly selected 185 total students of second semester during under-graduate academic session 2019-20. Descriptive statistics show that traditional opinion of rural-male centered agricultural education was no more present because now 40% of student body was coming from urban areas as well as enrollment of female students in agricultural sciences was also increasing. Results further show that in many aspects females enjoy near parity with males. Female students were comparatively spending less on food and mobile-related items during studies despite their higher income family status. Even female students were significantly surpassing males based on the previous school, college and first semester examinations. Comparatively higher proportion of females planning to continue agricultural education up to Ph.D implies that gender disparity in agricultural education is diminishing. Given forthcoming changes in the agrarian economy of Pakistan and the country being signatory to sustainable development goals, it is suggested that the government should enhance safe pick and drop facilities particularly to females to lessen disparities in agricultural education. Similarly, more job placements should be arranged to absorb forthcoming agriculture graduates in the market. Finally, large sample-based studies on finding the statistical relationships among socio-economic characteristics of agriculture graduates is also suggested to give input for the development of the agriculture sector of the country.

Keywords: agricultural education, descriptive statistics, gender, Pakistan, socio-economic components, university

INTRODUCTION

Pakistan has basically an agrarian economy and hence, agriculture always occupisses a priority position in the political agenda of the country. Considering the position of agriculture as a pull factor for the development of agriculture sector in the country, agricultural universities have also been promoting agriculture-based curricula emphasizing the practical side of education to develop a closer link between educational means and occupational choices. During the last decade, social trends promoting the usefulness of agriculture related studies have been reflected in rising enrollments at agriculture universities nationwide. There are two types of bachelor degree courses in the universities of Pakistan namely pass and honors degrees generally for 17 to 23 year old students. Pass degree program is slowly phasing out from Pakistan (Mukhtar *et al*., 2011). Students, after higher secondary school, may opt for a bachelor degree in engineering, veterinary medicine or human medicine, law, architecture, nursing or agriculture, for example which are almost 4-year specialized degree programs. According to GoP (2017), there are wide gaps in the enrollment of females and males at all levels of schooling right from primary to higher education. For example, the gap at 14 year's bachelor and 16 year's master in Pakistan is 4% and 10% respectively. This gap widens as there are more men (twice the number of women) studying in MS/M.Phil/ Ph.D programmes (Khokhar, 2018). The gap is

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attributed to conservative norms, parent's fear of unsafe environment for females at higher institutes (Mehmood *et al.*, 2018), lack of higher education institutions (HEIs) in the under developed and conflict regions, prevalence of imbalances on wages and privileges in certain professions as business, law, economics, agriculture and sometimes male-strength demanded fields such as technical fields (Hamid *et al*., 2020). Despite such issues confronting the country, the situation has improved much in 21st century wherein whole education sector including agriculture sector is witnessing the decreasing disparity on gender education. Government of Pakistan (2017) in National Education Policy reports an increased female enrollment ratio from 36.8% 47.2% by 2014. Although, there are total 62 universities with 34 in public sector and 28 in private sector in the country, yet, Pakistan does not compare favorably even with her neighboring countries like India and Iran who have twice as much of its eligible age group population enrolled in higher education than Pakistan (Hoodbhoy, 2009). Still the figures from Pakistan show that enrollment of both the genders, particularly females has been rising continuously between years 2001-02 to 2014-15. The total enrollment of students at universities/ degree awarding institutes and constituent colleges as well as ratio of female students as compared to males has increased from 276274 population (with 63% population of male students and 37% of female students) to 1298600 population (with 55% population of male and 45% population of female students) between year 2001-02 to 2014-15 (GoP, 2015). The number of international students admitted in Pakistan as a result of internationalization policy of Pakistan gaining momentum after establishment of Higher Education Commission in year 2002 (Zakaria *et al*., 2016) is additional to those statistics.

As discussed above, whole education sector including agriculture sector is witnessing the decreasing disparity on gender education during 21st century. The agriculture which was traditionally a male-centered education, is now receiving attention of both the genders as a nationwide interest in agriculture. Although the education level in Pakistan is very low (Ashraf *et al*., 2015), yet the General Enrollment Ratio (GER) of female students from both the rural and urban backgrounds has been seen rising in agriculture major. Diverse scientific disciplines and major subjects as well as dual degree programs with Dalhousie University Canada and IBA Sukkur, Sindh and according to findings of Capstick (2015), the prestige of the university along with low cost courses are reasons of attracting more and more students every year, particularly at the University of Agriculture, Faisalabad. Few interrelated phenomena are considered to promote increase in agricultural enrollments at universities: a change in socio-cultural beliefs about traditional farming, increased awareness about agriculture, and fundamental change in the structure of Pakistani agriculture. For many students and their parents, now agriculture is not limited to rural farming concept as the "psychology of shortage" has originated as a necessity in broadening the national economy from mere production to transportation, processing and marketing of the produce. Students have come to know that agriculture is now beyond the stereotypical farming and the agriculture has vast applications in farm-engineering, agri-business, agri-banking, and public sector research and development organizations. In other words, off-farm industries/sectors have underscored the importance of agriculture by expanding career opportunities in the country. As the spectrum of agricultural professions has widened, so has the range of people searching agricultural professions. The new growth in agricultural careers has also motivated the rural and urban masses to adjust their cultural beliefs in order to fulfill their ends. People are, resultantly, allowing their girls to get professional vocational and technical education in agriculture discipline in addition to earlier professions of school teacher, medical doctors, and engineers. Under such favorable developments, agriculture schools, colleges and universities are also expanding their curricula to accommodate both the genders. In fact, males and females as an identical group can differ in their strengths but who performs and does not perform a given standard is the utmost critical implication of gender analysis. Although disparity issues have been recorded in the country over several years by explaining the reasons of gender educational gaps in terms of lack of higher education institutions (HEIs), the distance between home and HEI, lack of security, societal and family pressure keeping women busy in domestic chores, yet literature on educational gender disparity matter mainly lacks information on certain important socio-economic variables that may impact opportunities of education for the women because socio-economic and cultural

factors are deemed to influence females' participation in higher education in the country.

According to Khokhar (2018), while finding gaps in higher education of the gender, it is equally useful to analyze the characteristics of students who graduate within universities. Actually, these socio-economic related variables are mostly collected by the universities in their admission forms but rarely used for research purposes in Pakistan despite the fact that such variables are of a great interest to development practitioners and universities as well (Hamid *et al*., 2020). In this background, present research was planned to collect data on pre-admission and after admission relevant variables that may depict any internal trends/associations/ relationships upon analysis. Thus, present research will add to the existing knowledge on the characterization of socio-economic factors impacting the gender analysis. The main goal of present work was to develop a comprehensive characterization and comparison/contrast of the situation of male and female students studying discipline of agriculture sciences duly recognizing that both men and women as equally important for the development of Pakistan as elucidated in education policy of 2017 (GoP, 2017). The other objectives were as: a) to explore similarities and differences in the certain previous socio-economic components of both the male and female students studying at the University of Agriculture, Faisalabad, b) to compare the academic achievements by gender before and after admitting onto degree programs, c) to explore future aspirations about higher education and professional career in the context of higher education and employability of the target population, and d) to suggest future line of study and research for the development of agriculture sector of the country.

MATERIALS AND METHOD

In view to set goal of providing an acceptable and comprehensive characterization of students' position in higher education, following research questions were set:

Research questions

- Do female students admitted onto degree programs differ on the basis of previous background with respect to family income, residency origin, and attended school/ college with male students?
- Do female students have pre-university performance differences in terms of matriculation/ intermediate examination scores at par with male student?
- How the performance on the university admission test varies by gender?
- Whether females are better performer or male in first semester results?
- Who devotes more time to studies at university?
- Who is the final decision maker on selection of degree program between students and their parents?
- Who has higher aspirations of Ph.D studies?
- Who would join public or private sectors for job?
- Which data set variables might be showing significant difference between sexes?

Research design choices

Study area and the participants

The research philosophy of positivism was adopted here keeping in view the quantitative nature of the case study. To objectively observe the situation of gender, the study area was the University of Agriculture Faisalabad. This is a public university founded in 1906 with the mandate to improve and accelerate agricultural development in the region of Punjab-Pakistan. It is ranked #954 in the best global universities, #250 in the best global universities in Asia and #6 in the best global universities in Pakistan, based on 13 quality indicators (US news and world report, 2022). Student diversity is depicted on account of the blend of male to female, rural to urban, poor to rich, students from nuclear to joint family systems, as well as having other diverse personal and family characteristics. Presently, more than 45% of total strength is female students studying at UAF. Keeping in view the increasing influence of socio-economic factors on gender educational disparity, the science discipline (agricultural sciences) and the UAF are purposively selected to study differences and similarities in selected characteristics of the large student body for making informed decisions about future line of action regarding further development of agricultural courses, planning jobs in the market for future leaders based on their job aspirations that ultimately will contribute to the agricultural development of the country. The selection of UAF is a place where large student population is coming from public and private sector past colleges. Students are admitted on the basis of different admission criteria such as rural and

urban quota for male and female in addition to considering score on general aptitude test (GAT). This diversity of admission criteria may further help the moderator in selection of unbiased sample size of male and female students for conducting comparative study of their socio-economic characteristics. This investigation used a descriptive design of socio-economic variables which was gender segregated for comparisons.

Socio-economic including educational variables

At the time of admissions, data on many useful variables is collected in the forms but universities mostly don't use all of the available information. However, these variables particularly related to socio-economic including educational variables are very helpful to the social scientists in order to draw useful insights by playing with these variables. To this end, various socio-economic variables falling under educational, socio-economic, geographical, performance, preference for degree and preference for future career categories were decided to include in the gender analysis that may yield some insights on the relationships among each other, thus paving the way for deeper econometric analysis in future. The age of respondents, family background, nature of last attended school, score on UAF entry test, marks in matriculation, intermediate, GPA obtained in first semester, daily study hours, family monthly income, money collected from home for university expenses, bill on food, mobile phone (with internet), selector of agriculture degree course, intended stay for higher degree and future career plan like variables were included in gender-based analysis.

Sampling and data collection

The population and hence primary institution for present research were first year students of Faculty of Agriculture at University of Agriculture Faisalabad (UAF) admitted during session 2019/20. Generally, new-comer university students provide unique experiences as to which characteristics can be helpful in describing students' academic achievement (Robinson, 2018). Therefore, primary data through a well designed questionnaire was collected through random sampling of (185 students) to know their socio-economic and educational characteristics. Before final data collection, the questionnaire was pre-tested on 10 students from study area to have researchers' interested components that might fulfill the needs of those involved in agricultural administration. The team of experts from Pakistan Agricultural Research Council (PARC) used the refined questionnaires for final cross-sectional data collection through face-to-face interview method.

However, the sample size was determined on the basis of following formula:

$S = n /1 + n (e)^2$

Where, n= Number of students, e = 10% level of precision which is +10%.

On the basis of almost 1000 new admissions in the faculty of Agriculture, sample size turned to 195. After dropping questionnaires containing missing information, the valid sample size was 185 students (representing 94% of total questionnaire distributed) giving almost equal representation to both males (95) and females (90) in the final sample. Sample size/ return rate of 94% is enough for the research study based on the assertion of Moser and Kalton (1999) who considered survey as biased and insignificant if the filled questionnaires rate of return is lower than 20-30% (Moser and Kalton, 1999).

Data analysis

To fulfill the goal of the study, the examination of gender-related differences in various socio-economic factors, the study mainly uses the data mining techniques of classification and association of Pujari (2013) and results are reported in terms of frequency, mean, percentage, and standard deviation. The purpose of analysis was to provide the reader with the best display for how two or more socio-economic variables of interest actually affect the desired outcome. Basically, the study is exploratory in nature about important socio-economic characteristics of population (gender) studying at the university. All the analyses were performed with the SPSS software (Statistical Package for Social Sciences version 17.0).

Ethical considerations

The respondents were informed about the purpose of research study, their rights, such as not to answer every question on the questionnaire or may stop participation if they feel uncomfortable due to their class schedules. They were also informed about the steps taken to protect their personal information provided on questionnaires for the use of researchers.

Study limitations

Although the sample size of the study was small based on a case study of only one university of the Punjab Province depending on the time and financial constraints, yet the results provided are valuable and unbiased because of random selection of students/respondents belonging to both sexes. Anyhow, comprehensive studies based on large sample sizes from more universities should be conducted to elucidate the gender differences in socio-economic characteristics of the agriculture graduates studying at Pakistani universities.

RESULTS AND DISCUSSION

Average socio-economic characteristics of the respondents and their family

As socio-economic information is important in a resource management context, (Table 1) through 6 highlights the results of survey on selected socio-economic including educational characteristics of students. Table 1, presents a summary comparison of the average descriptive statistics of male and female students. The overall mean age of the student respondents going to university was approximately 18.9 years at the time of survey (i.e. second semester). Female students were comparatively younger than male students and the difference is significant at alpha value 0.01 (1%). The age bracket of 17-23, in present research, matches with the recent findings of Mehmood *et al*. (2018), who also found the age bracket of 17-24 in Pakistani universities. But the average age of male students was 24-27 years dating back to the 1960s when the agricultural degree program was started at University of Agriculture Faisalabad (Shafiq, 1986).

Student admission test for entry into higher education decides the quality of students. Countries properly managing higher education system generally don't compromise on it and enroll students based on previous academic score, entry test and sometimes recommendations. But, the University of Agriculture, Faisalabad mainly focuses on first two parameters. Present research shows that students obtained an overall average test score of 62 out of 100 with similar performance of both the genders, though minimum score of 40 was on the credit of females and maximum (87) was on the credit of males. Performance in aggregate score (sum of marks obtained in secondary school, higher secondary school and university admission test) was also the same. However, female students enrolled at university were mainly clearly outperformers in intermediate examination as achievement of both the male and female students widely differs (significant at 5%). After joining the university, both the genders were on average devoting two and half hours for studies at home/boarding house. But male students were comparatively allocating more time to studies (24 hours) than female students (2 hours).

Total monthly income of females' parents was slightly higher (excess of Rs.9000) than family income of male households but this difference in not significant between the sexes. Overall average family income of slightly over rupees fifty thousand implies that households sending their children to agriculture universities on average belonged to mediocre families. The male students were collecting significantly a higher amount of monthly expenses (over Rs.10000) in contrast to female students (Rs.7194). Minimum received pocket money of Rs.1000 indicates that some students were day-scholar (non-boarder). In accordance with higher monthly budget received by male students, monthly expenditure incurred on food related items and mobile phones including internet were also significantly higher in case of male students than female students as evidence from p-value. But surprising results are that female students are more frugal student in matters of expenditures on food and phone-related items than male students because female students were spending comparatively lower budget (50%) on food and 7.6% on mobile phone whereas male students were proportionally incurring 54% on food and 8.5% on phone related items. In addition, female students were collecting meager share from their parents' income (13% of their family income) as pocket money to fulfill their routine expenses than male students who were collecting a lion's share (21%) out of their parents' monthly income.

Another interesting finding is that female students with their frugal nature were performing highly better than male students by achieving grade point average (GPA) score of 3.41 and the difference is highly significant at 1%.

Table 1. Summary result of socio-economic characteristics of the respondents and family

Characteristics	Gender	Mean	S.D	Min.	Max.	Sig.
Age (years)	Female	**Mean**	**S.D**	**Min**	**Max**	**Sig.**
	Male	18.74	.931	17	21	-
	Total	19.21	1.110	17	23	-
UAF entry test marks	Female	18.98	1.050	17	23	0.002*
	Male	62.33	10.191	40	80	-
	Total	61.57	9.821	44	87	-
Matriculation obtained marks	Female	61.94	9.983	40	87	0.604
	Male	912.40	97.988	651	1058	-
	Total	904.77	96.338	636	1060	-
Composite score	Female	908.48	96.955	636	1060	0.594
	Male	844.27	97.037	610	1005	-
	Total	817.54	88.888	601	974	-
Daily Study hours	Female	830.54	93.651	601	1005	0.052**
	Male	1819.00	186.449	1352	2126	-
	Total	1783.87	171.454	1332	2044	-
Family income (Rs./month)	Female	1800.96	179.283	1332	2126	0.184
	Male	2.40	1.595	0	7	-
	Total	2.41	1.355	0	6	-
Expenses from Home (Rs./ month)	Female	2.40	1.472	0	7	0.952
	Male	56077.78	36490.180	13000	200000	-
	Total	47031.58	40607.476	17000	300000	-
Food bill (Rs./month)	Female	51432.43	38820.336	13000	300000	0.113
	Male	7194.44	4690.233	1000	20000	-
	Total	10022.47	4345.132	1000	20000	-
Phone + Internet bill (Rs./month)	Female	8600.56	4726.919	1000	20000	0.000*
	Male	3596.67	2529.620	100	12000	-
	Total	5406.52	2354.878	500	10000	-
GPA obtained in first semester	Female	4511.54	2599.581	100	12000	0.000*
	Male	551.17	607.726	0	3000	-
	Total	848.68	596.101	0	3000	-

(Authors' survey-based estimates) *significant at 1% and **5%

Table 2. The type of student's last academic college

Gender	Private	Public Sector	Total	Sig.
	N (%)	N (%)	N (%)	
Female	65 (72.22)	25 (27.8)	90 (100)	0.014*
Male	52 (54.7)	43 (45.3)	95 (100)	
Total	117 (63.2)	68 (36.8)	185 (100)	

(Authors survey data) *significant at 1%

The research of Kashif *et al*. (2021) also reported similar findings that Pakistani female undergraduate students comparatively better perform academically on account of their better study habits reflected in more time allocation to studies and interest in homework and assignments. Previous studies of Upadhayay and Guragain (2014) and Khoso *et al*. (2019) have also shown that cognitive performance of students in terms of higher academic grades is better reflected in female students than male students in Nepal and Pakistan respectively. The achievement of better GPA score on grounds of frugal nature of females and comparatively higher income status is in line with the findings of Butler *et al*. (2008) that performing academically well is related to handling matters in life with frugality and supported by Checchi (2000), Daniyal *et al*. (2011), Altschul (2012) and (Aghus and Makhbul 2002) that the strong family income/socio-economic status has direct and positive influence on youth's marks as better resources mean less hardships in studies.

Frequency distribution of the gender-segregated characteristics

The last attended college: Public versus Private

Mainly two types of educational institutions namely public and private are present in Pakistan. Private sector entered during 1990's-2000's as a major competitor to public sector schools and by the end of 2007-08, it was training 12 million students in the country (Awan and Zia, 2015). Table 2 shows these two types of schools and respective progeny of male and female students prepared. Overall majority of students (63%) getting admission in UAF completed their intermediate from colleges run

by the private sector. On the basis of overall statistically significant differences regarding type of last attended college, a large number of female students (72%) were coming from private sector colleges while larger number of male students (45%) completed their intermediate schooling from public sector colleges. The strong and positive correlation/association between gender (female) and last attended college (private sector) may be due to less number of public sector colleges for females in the country or government sector colleges rarely provide pick and drop facilities to the students, hence, parent send their girls to private sector keeping in view the safety concerns.

Background of students

According to Pakistan Bureau of Statistics, students at the level of BA/BS/ and equivalent are three times more from urban areas (6.78%) as compared to rural origin (1.96%). However, according to present results, majority of the students (60.5%) at the University of Agriculture belonged to a rural background in contrast to the Bureau's report. The differences regarding family background are strongly linked to the gender as evident from p-value highly significant at less than 1%. At the time of establishment of UAF, mainly male students from the rural backgrounds used to join university. This trend in last couple of decades has been changing and attracting more urban and female students. The increasing enrollment of females at tertiary education in Pakistan is also in line with the study of Hamid (2020) in Sudan which shows the gap in enrollment in agriculture discipline is increasing at higher education institutes. The GoP (2017) also reports the increasing number of female enrollments up to degree level institutions and the enrollment gap between male and female students is now at 10% in various universities from public and private sectors of the country (GoP, 2015). According to results in (Table 3), analysis by gender indicates that equal numbers of females were representing both the rural and urban cultures. However, females were mostly from urban areas and males were mainly from rural backgrounds. This rural-urban interface of student backgrounds is changing the traditional conception of rural-male dominancy on agriculture in the country.

Selector of agriculture degree program

It is universally acknowledged that parents play distinctive roles in the success of their children in every walk of life through moral support of economic, social and human-capital. Given their maturity level (above 19 years old), the majority of students were able to choose the agriculture sciences after higher secondary school examinations. This finding suggests that students themselves were capable enough to choose agricultural sciences as a future line of study. This finding is highly supported by Capstick (2015) that the students themselves are choosing the course and university in Pakistan. Research further shows that influence of parents in program selection was more on males than females while self-selection of program of study was realized mainly by the males. The influence of elders particularly the parents in matters of their children's education is common in every culture of the world, for example, American parents also care deeply about their children's education and expect excellent academic performance from their children (Martinez *et al*., 2004).

Table 3. Background of students

Gender	Rural	Urban	Total	Sig.
	N (%)	N (%)	N (%)	
Female	45 (50)	45 (50)	90 (100)	0.004
Male	67 (70.5)	28 (29.5)	95 (100)	
Total	112 (60.5)	73 (39.5)	185 (100)	

(Authors Survey Data) *significant at 1%

Table 4. Selector of agriculture degree program

Gender	Parent imposed	Self-decided	Total	Sig.
	N(%)	N(%)	N(%)	
Female	26 (28.9)	64 (71.1)	90(100)	0.808
Male	29 (30.5)	66 (69.5)	95(100)	
Total	55 (29.7)	130 (70.3)	185(100)	

(Authors survey data)

Choice of future career place

Almost every student desires to earn income after completion of studies by joining either the private or public sector. Table 5 shows that two-third majority of students were desirous of joining career in any available sector implying that the livelihood earning was their main concern rather than any preference for job place exactly in line with Maqsood and Maqsood (2017) who reported that majority of educated students (53%) were planning to enter any labor market irrespective of preference for sectoral tag. However, both the genders, on the basis of reported confirmation, were equally interested to obtain some kind of job in a white-collar, public sector organization as the public sector is considered a symbol of social and personal status in the social context of Pakistan. Similarly, female students were least likely to expect a

private sector occupation as compared to male students. The career aspirations of both genders were proving forthcoming structural changes in traditional agriculture by extending application of agricultural education from rural to urban settings as public and private sector jobs are mostly in cities. Though these were merely opinions from students about their future career plans, yet these pieces of information lead to assume that the rate of market participation of the educated labor will be increased in future thereby exerting more pressure on employers to absorb particularly the female labor force because in reality more men are appointed on academic and administrative posts in Pakistan (Khokhar, 2018) and already gender disparity exists in managerial positions (Batool *et al*., 2013).

Table 5. Choice of future career place

Gender	Public sector	Private	Anywhere	Total	Sig.
	N (%)	N (%)	N (%)	N (%)	
Female	27(30)	4 (4.4)	59 (65.6)	90 (100)	0.387
Male	25 (26.3)	9 (9.5)	61 (64.2)	95 (100)	
Total	52 (28.1)	13 (7)	120 (64.9)	185 (100)	

(Authors survey data)

Intended stay period at university.

Table 6% the general study goals of agriculture students that need to be understood and analyzed while designing future strategies by the higher ups sitting in the universities and the bureaucracy. Overall statistics show that one-third majority of students at the moment could not report intended stay period for their future advanced degree from the same university. However, among reported advanced degree options, the overall next majority of students had opinion that only graduation (16 years education) will be sufficient for entering into professional career. In addition, approximately 12% students were planning to continue studies up to Ph.D degree. However, interesting was that a larger number of females (52%)-within intended stay plans, were really expecting to continue towards Ph.D degree in agricultural sciences as compared to male students. This finding, when analyzed along with a comparatively higher income level of families of female students, is in line with the findings of Liu *et al*. (2006) that higher family income is one of the reasons for prolonged stay for advanced degree purposes in Taiwan. According to Mehmood *et al*. (2018), mentality of people (parent's fear of non-safe environment at higher education institutes) and hostile attitude towards girls' higher education is the cause of lower ratio of females' participation in education (Sen, 2011) but contrary to their view points, present research concludes that females' participation in education is fully supported by the parents as usually the first support and opposition to females comes from home. Thus, the support from parents and participation of female students at par with male students in higher agricultural education (Ph.D) in present research imply that gender discrimination is diminishing from Pakistan because the gap is closest on the matters of graduation and post-graduation pursuit of males and females. Moreover, intended stay plan provides baseline information about tentative plan of stay at university for earning a minimum qualification required for immediate entry into a professional career or continuing towards higher studies. Anyhow, understanding of human dimensions is critical in attempts to involve stakeholders in every venture because prospective projects/ policies often fail due to lack of understanding and incorporation of the socio-economic needs and concerns of stakeholders (Cinner and McClanahan, 2006).

Table 6. Intended stay period at university

Gender	Bachelors	Masters	Direct MPhil (after bachelors)	Ph.D	Not confirm (at present)	Total	Sig.
	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	
Female	28(31.1)	6(6.7)	11(12.2)	12(13.3)	33(36.7)	90 (100)	0.937
Male	28(29.5)	8(8.4)	15(15.8)	11(11.6)	33(34.7)	95 (100)	
Total	56(30.3)	14(7.6)	26(14.1)	23(12.4)	66(35.7)	185(100)	

(Authors Survey Data)

CONCLUSION AND RECOMMENDATIONS

The findings of present study have revised many commonly held generalizations about students of agriculture. Although major chunk tended to come from rural areas, yet the agricultural students were a blend of rural and urban cultures as well as heterogeneous group of males and females in contrast to common belief that agricultural students in Pakistan are homogeneously male and rural in their origin. Private sector was advancing good outreach in rural areas in addition to urban centers and resultantly, major chunk of male and female students at University of Agriculture, Faisalabad was from private sector colleges. Surprisingly, the female students were comparatively younger and well performer during their first semester examinations. Despite less monthly receiving from their affluent parents, females were seen more frugal in matters of expenditures on food and phone-related items. However, the performance of both sexes with respect to entry

test score for admission purposes was not significantly different from one another. After joining the university, both the genders were on average devoting two and half hours for studies at home/boarding house. But male students were comparatively allocating more time to studies (2.4 hours) than female students (2 hours). Although females outperformed in matriculation and intermediate examinations and in GPA score, but the value male and female students placed on education is evident from their pursuits of higher education. Moreover, more prospective female students in advanced education in agricultural sciences is an indication of diminishing gender disparity in matters of education. Similarly, both sexes were showing equal tendency to join public sector because both think that government job is prestigious in local community and perhaps an easy way of finding life partners for marriage. Given their maturity level, both genders were able to independently decide degree program for studying at university.

The future career plans further proved that structural changes are happening in the agrarian economy of Pakistan and agricultural education will open up new horizons in off-farm labor market in coming years. Given changes in agricultural industry structure in Pakistan, agriculture sciences similar to medical and engineering sciences, can take up the challenge of ensuring significant participation of both the genders, thus, minimizing the gender disparity in education to a large extent. In this respect, government should take steps to enhance safe pick and drop facilities in public sector institutes to lessen gender disparities in education. Keeping in view the forthcoming changes in agrarian economy, the country being signatory to sustainable development goals and present trend of changing traditional male-centered rural belief of agricultural education, government may exert more efforts to absorb female agriculture graduates in agriculture sector. Present study was a little attempt to showcase the growing interest of parents and their offspring in pursuit of agricultural education and future aspirations based on previous socio-economic circumsta-nces; however, future research is suggested to know the significant relationship among the socio-economic components of the students at country level (with large sample size).

CONFLICT OF INTEREST

All the researchers declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this manuscript.

AUTHOR'S CONTRIBUTION

R. Saeed: Conceived the research idea, conducted the research and prepared the manuscript.
A. Bashir: prepared the research instrument and supervised the overall research write-up.
S. Naheed: Helped in questionnaire design and data collection.
M. Abbas: Full help in data collection
I. Mahmood: Prepared methodology and proof reading the paper.

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