

**Dissertation Topic:** Participation of women in procurement/supply chain profession in Bangladeshi Development organizations



# Dissertation for MPSM

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## ACKNOWLEDGEMENT

This dissertation is prepared for the course named PSM-667: Dissertation. This is a graduation requirement for the Masters in Procurement and Supply Management (MPSM) degree under BRAC Institute of Governance and Development (BIGD), BRAC University. The topic of this dissertation is “Participation of women in procurement/supply chain profession in Bangladeshi Development organizations”.

I wish to thank my instructor Mr. S. M. Arifuzzaman, Assistant Professor, BRAC Business School, BRAC University, for his kind guidance, advice and encouragement during the course of this study and preparing this dissertation.

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My family members deserve special credit for giving me adequate hope and praise to prepare this dissertation with perfection. At times, I deprived my young sons from their much waited family time with me so that I can concentrate on this dissertation. My wife was kind enough to allow me the time to concentrate on my studies. My family inspired me to prepare the highest quality dissertation possible.

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*Disclaimer: This dissertation is prepared purely for academic purpose. The contents of this dissertation is the sole responsibility of M Sirajam Munir and do not necessarily reflect the views of United States Agency for International Development (USAID) or the United States Government to identify parties responsible for the contents.*

## LETTER OF TRANSMITTAL

July 16, 2016

Mr. S. M. Arifuzzaman  
Assistant Professor  
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**Subject: Submission of Dissertation for the Masters in Procurement and Supply Management (MPSM) degree**

Dear Sir,

It is a pleasure for me to submit the dissertation as per the University requirements and guidelines. It was a great experience for me and it also gave me the taste of practical research experience on the participation of women in the procurement profession. I am grateful to you for your help and guidance.

I hereby certify that I have not adopted any plagiarism while preparing the dissertation as submitted. The whole dissertation is prepared predominately using the primary data which was not tempered or manipulated by any means. All the data and analysis as presented in the dissertation are original work from me. I have tried to provide proper citation for the secondary data I have used for this dissertation.

I hope and request that you would be kind enough to accept the dissertation. Sir, if you need further information regarding this report, I am always ready to provide necessary information regarding this report.

Sincerely,

M. Sirajam Munir  
ID # 14182008

## **CERTIFICATION FROM THE INSTRUCTOR**

This is my pleasure to certify that the dissertation entitled “Participation of women in procurement/supply chain profession in Bangladeshi Development organizations” is the original work of M Sirajam Munir which was completed under my direct guidance and supervision. As far as my knowledge, the dissertation is an individual achievement of the candidate’s own efforts, and it is not a conjoint work.

I also certify that I have gone through the draft and final version of the dissertation and found it satisfactory for submission to the Institute of BRAC Institute of Governance and Development, BRAC University, Bangladesh in partial fulfillment of the requirements for the degree of Masters in Procurement and Supply Management (MPSM).

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## ABSTRACT

Although the survey findings, expert interviews and secondary data do not substantially prove that there is sufficient participation of women in procurement/supply chain profession in Bangladeshi development organizations, the participation of women in this profession appears to be higher in comparison with for-profit and government organizations. Hence, the null hypothesis cannot be accepted provided that the research findings sufficiently indicate that there is not enough female in procurement profession in Bangladeshi development organizations. In addition, the secondary data and expert interviews also indicate that women often do not hold the managerial and higher level positions in the context of Bangladeshi development organizations.

This is a problem identification and exploratory research in nature. The research was very heavily reliant on the primary data analysis. A survey was conducted based on the set research objectives. A total of 41 respondents provided their inputs and comments in the survey over the period of three months which formed the basic building block for the hypothesis testing. The researcher also conducted three expert interviews with the three prominent gender and Human Resources experts to validate and elaborate the findings from the surveys. In addition, two cases relating to the barrier to entry and gender stereotype were used to validate and elaborate the findings from surveys and expert interviews. The secondary data was reviewed and analyzed based on the participation of female labor force in the global context, participation of female labor force in the Bangladeshi contexts and Bangladesh Gender Statistics of 2012. Hence, the research triangulated different types of findings from primary and secondary data.

Secondary data analysis indicate that Bangladesh has a high rate of labor force increase per year for the inclusion of female work force. However, female workforce is far behind in comparison to the accomplishment of higher degrees in comparison with the male work force. In addition, participation of female in administrative and professional positions is very low in Bangladesh. Globally, women are more likely to participate in the more informal and less paid jobs in comparison with male counterparts. Early marriage is an important reason why many women do not complete higher education and participate in the management positions in Bangladesh. Women in Bangladesh are more likely to participate in the flexible and irregularly paid jobs as they might need more time for the household works. This does not help women to participate in specialized positions.

All the survey respondents have at least bachelors/BA degree. Hence, It is expected that the procurement/supply chain professionals will be highly educated. The survey results indicate that participation rate of female procurement professional as whole is low (12.10%) in comparison with male. However, participation of female in the development organizations is much higher (29.73%) in comparison with the other types of organization. Gender experts suggested that participation of women can be improved further by increasing the skills sets for this profession and allowing higher education. Most of the survey respondents (85.12%) thought that participation of women in procurement/supply chain profession is low in Bangladesh. Most of the survey respondents disagreed that male could be more effective and efficient in the procurement/supply chain profession in comparison with the female. Most of the survey

respondents agreed that there are challenges for women to participate in the procurement/supply chain profession. The experts also mentioned that there are perceived challenges for the female procurement/supply chain professionals.

Most of the respondents thought that employees prefer male over female. This fact was further verified through a case study and review of some of the recently published job announcements for the procurement/supply chain professions. It was observed that many organizations actually restricted their jobs only for the male applicants. Experts indicated reasons such as support services, patriarchal attitude, lack of relevant skills, lack of negotiation skills and stereotype mentality as the general challenges for women to participate in procurement/supply chain profession in the context of Bangladesh. Most of the survey respondents thought that more training and flexibility will allow female to participate in this profession. Experts mentioned that there is scope for the capacity building in this profession.

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## 1. INTRODUCTION

### 1.1 ORIGIN OF THE REPORT

This dissertation is a graduation requirement of the course named PSM-667 (Dissertation) for the students who are pursuing Masters in Procurement and Supply Management (MPSM) degree under BRAC Institute of Governance and Development (BIGD), BRAC University. This research paper was prepared for Mr. S. M. Arifuzzaman, Assistant Professor, BRAC Business School, BRAC University, after having the authorization of doing report on the topic of “Participation of women in procurement/supply chain profession in Bangladeshi Development organizations”.

### 1.2. BACKGROUND OF THE REPORT



“If you want something said, ask a man;  
if you want something done, ask a  
woman.” -- Margaret Thatcher

Indeed, women often comes to the professional world with a can do attitude that helps organizations to achieve its objectives. I have a procurement profession career with over a decade long experience. Over the years, I have seen

that there are only handful of women participants in the procurement career. In addition, the Masters in Procurement and Supply Management (MPSM) program had only few female students. Overall, it gave me an impression that the number of women in procurement profession might be very low. Considering the fact that workplace diversity can help a long way to achieve team based efficiency and gender balance, I thought that it would an interesting topic to start working on. I thought of many other topics relevant to procurement and supply chain functions but this particular topic regarding women's participation in procurement profession really moved me and encouraged me. With this research I want to find out how actively women are participating in the procurement profession. Additionally, I want to find out if there is any hindrance for women in participating the procurement profession. If there is underutilization of women in the procurement profession, I would like to find the cause of the underutilization.

## 2. OBJECTIVES

I would like to conduct an exploratory research rather than a systematic statistical hypothesis testing. This could be the plot for further research in this specific area. The objective of this research would be finding out how actively women are participating in the procurement profession and find out specific interference that might block women from picking procurement as a career choice. In that regard, I would like to find out participation rate of women in procurement profession. I would like to evaluate the participation of women in development organizations such as multilateral and unilateral donor agencies, national and international NGOs and humanitarian organizations that are located in Dhaka, Bangladesh.

The objects of this research study are as follows;

**1. To understand about the general profile of the procurement/supply chain professionals:**

In order to understand the relative participation of women in the discipline of procurement/supply chain profession, it is essential to know the profile of the professionals who are currently working or going to work in this profession.

**2. To find out the participation rate of female procurement professionals in the Bangladeshi development organizations:**

Though number is not the key to determine whether there is sufficient participation of women in the procurement/supply chain profession, it will give a strong indication about the relative presence of women in this profession in comparison with the men. It is also essential to compare the participation rate of women in development organizations with the for-profit and government organizations.

**3. To understand how and why people become interested to serve in the procurement/supply chain profession:**

It is essential to understand how and why people become interested to work in this particular profession. It will be interesting to observe whether people come with previous experience and relevant educational experience.

**4. To find out opinions from professionals regarding different aspects of women's participation:**

To understand whether there is sufficient participation of women in the procurement/supply profession, it is essential to find out perceptions of the professionals who work in this profession. Following aspects were explored:

- Sufficient participation of women in this profession
- Conducive work environment for women to work in this profession
- Possible gender stereotype
- Effectiveness and efficiency of female in comparison with the male professionals
- Positive attitude towards the participation of women
- Perceived challenges for the female professionals
- Effectiveness of female professionals in development organizations

**5. To explore the perceived challenges for the female professionals**

It is essential to explore whether there are any possible challenges that keep female professionals from participating in this profession.

#### **6. To find out possible ways to integrate women in the procurement/supply chain profession:**

Finally, I would like to explore the ways which will help women to be integrated in the procurement/supply chain workforce.

### **3. SIGNIFICANCE OF THE STUDY**

The significance of this study is;

- This study will help to find out whether there is sufficient participation of women in the profession.
- The findings of this study will reveal possible reasons for selecting procurement/supply chain profession from the professional perspective.
- Recommendations of this study will help decision makers to integrate female professionals in this profession.
- This study will help explore further scopes of studies regarding women's participation

This research will explore different dimensions of women's participation in the procurement professions. I think this will help me to find some of the specific reasons for selecting or avoiding procurement professions among women. The results of the exploratory research will help us understand the current situation of women in procurement professions. The research will also explore some of the interferences and career blockades regarding choosing procurement professions from the women's perspectives. Ultimately, this research has the potential to contribute to the knowledge which will improve efficiency in team performance in different organizations with increased participation of women.

### **4. HYPOTHESIS**

**Research problem-** Find out whether there is sufficient participation of women in the Bangladeshi development organizations

**Research Questions-**

- Are women actively participating procurement profession in the Bangladesh context?
- Is there sufficient representation of women in procurement profession in the Bangladeshi development organizations?

- What are the hindrances of participating in procurement profession from the women's perspectives?
- What are the prospects of choosing procurement career for women?

**Null Hypothesis- $H_0$ :** Women have equal participation in the procurement profession in Bangladeshi development organizations

**Alternative Hypothesis-  $H_1$ :** Women do not have equal participation in procurement profession in Bangladeshi development organizations.

Hypothesis Testing Decision Rule: Since equality is a vague word, it will make sense to focus on the participation of women in terms of number, participation of women in terms of career preferences, perceived hindrances for participating in procurement professions, and level and types of discriminations for participating in procurement profession. Hence, the hypothesis testing will require reliance on multiple variables. As such, it will be a composite hypothesis testing. In addition, there are quite a few subjectivities with regards to participation, discrimination and equal rights. Hence, I am planning to rely on expert interviews as well to test the hypothesis.

## 5. METHODOLOGY

### 5.1. CLASSIFICATION OF THE RESEARCH

**5.1.1. Problem identification rather than problem solving:** This study will not try to resolve the problem of low, high or moderate level of participation of women in the procurement/supply chain profession. Rather, it will try to focus on the identification of the problem that might exist with regards to the participation of female professionals in this profession.

**5.1.2. Exploratory research rather than conclusive research:** This research provides insights and understanding on the participation of female professionals in the procurement/supply chain profession. It is not mandatory to test hypotheses in this kind of research. Yet, hypothesis is developed so that the whole study does not lose the focus and a conclusive recommendation can be made. It is notable that some researchers keep hypotheses in their exploratory researches. Some of the characteristics of this exploratory research are following;

- Research process is flexible and unstructured.
- Sample size is small and non-representative.
- Analysis of primary data is qualitative.
- Findings of this research are tentative rather than conclusive.



**5.1.3. Based on primary data rather than the secondary data:** The researcher could not locate any similar kind of report, survey or analysis for participation of women in the procurement profession. However, the researcher found the following reports/articles which contained some relevant information:

- 2012 Gender Statics as published by Bangladesh Bureau of Statistics
- 2010 ILO publication titled Women in Labor Markets: Measuring Progress and Identifying Challenges
- 2012 World Bank report titled 'Gender Differences in Employment and Why They Matter'
- 2006 World Bank working paper titled "Gender and Labour Market: Trends and determinants"

Beside, several other reports and articles were carefully reviewed by the researcher. The full disclosure of the all the articles and reports are available in the secondary data analysis section with proper bibliography and website links, as appropriate.

## **5.2. PRIMARY DATA ANALYSIS METHOD**

On October 11, 2015 the researcher shared the research proposal with the instructor for his review and comment. The research proposal was prepared following the guidance provided by the non-credit course titled PSM 666, Research Methodology. The researcher met with the instructor on the proposed research topic. The researcher and instructor had a detailed discussion on the research topic on October 13, 2015. The researcher explained why the topic was selected and how the researcher wants to perform the research and present the dissertation. The instructor provided some very helpful tips and guidance to initiate the process. It was planned that the dissertation would be completed by November 24, 2015 as per the initial deadline provided by the BGID for the Fall 2015 semester. However, due to the course work, family and professional obligations, the researcher could not finish the dissertation on time.

**5.2.1. Mix of qualitative and quantitative data:** Both qualitative and quantitative data were used for this research. The researcher collected primary data through survey and in-depth interview with the experts in the fields of gender and HR. In addition, case studies were conducted for some of the important issues such as gender stereotype and exclusion of female professionals for procurement/supply chain professions.

**5.2.2. Survey:** A survey was conducted on 41 respondents which included 39 procurement/supply chain professionals. The survey can be considered the heart of the study as it generated the basic data sets towards the objective of the study. The expert interviews were conducted to substantiate and elaborate the findings from the survey. The details of the survey are available in the survey section of primary data analysis.

**5.2.3. Expert Interview:** Three expert interviews were conducted based on the seven set questions which were formulated keeping similarities with the survey questions. As mentioned above, the expert interviews will help the researcher to find more information and substantiate the findings from the survey.

**5.2.4. Case Study:** Case studies are basically real life events and stories from two procurement/supply chain professionals/students. Case studies were conducted regarding the two issues; (1) gender stereotype, and (2) exclusion of female professionals from recruitment process. The researcher came across these two issues during the analysis of the primary data. The case studies will further strengthen the primary data analysis by providing real life example.

**5.2.5. Quota sampling technique used for the survey:** Quota sampling technique was used for conducting the survey. Quota sampling is a non-probability sampling technique. This technique was used due to exploratory nature of the research. However, the researcher did not control or select all the participants for the survey. There are procurement/supply chain professionals from corporate sector (for-profit organizations), development organizations and government organizations. In addition, there are students of the procurement and supply chain who will join the work force within a short time. Additionally, there are female professionals, male professionals, etc. It was essential to include all types of professionals so that there are enough representations to provide a clear and conclusive outcome. The researcher tried to share the link of the survey to all types of professionals. However, it was noticed that only male responders were providing response at the initial stage. Hence, the researcher tried to encourage and reach out female professionals to respond to the survey. As such, a fully random survey could not be conducted due the problem in the sampling. Yet, the researcher tried not to engineer or control the sampling elements too much and tried to keep the sampling approach as close to the random as possible. The details of the data collection are discussed under in the survey data analysis section.

**5.2.6. Sampling size for the survey:** The population size of the procurement professionals is not known to the researcher. As per Gender Statistics of 2012 as published by Bangladesh Bureau of Statistics, there were around 16,200,000 women workforce aged above 15 in 2010. The Gender Statics also indicates about .6% of the female workforce work in the “administrative, managerial” category which would be around 97,200 professionals. Per the same estimate there were about 606,400 male administrative, managerial professionals (1.6% of the 37,900,000 workforce). Since there were no functional labor categories such as finance, HR, administration, accounting, etc, we have to estimate the numbers. As per the categorization of occupations as listed in the figure number 1, “administrative, managerial” category appears to include all the administrative and managerial positions such as finance, HR, admin, procurement, etc. managers. The category appears to include government, for-profit and development organization professionals all together. Provided that not all organization might have separate procurement/supply chain professionals and there are other functional labor categories in the “administration, managerial” occupation category, we can assume that 5-10%

of the professionals would be procurement/supply chain professionals, for the purpose of the estimation. Hence, there could be around 4,850-9,720 female procurement professionals and 30,320-60,640 male procurement/supply chain professionals in 2010. The Gender Statics of 2012 clearly states one aspect about the disparity of representation of women in “administrative, managerial” occupation category. There are around 97,200 female administrative-managerial professionals as opposed to around 606,400 male professionals which is around 6.2 times more than the female representation.

Figure 1- Employed persons 15 years and over by occupation, sex and residence, 2010

Major occupation	Bangladesh		Urban		Rural	
	Women	Men	Women	Men	Women	Men
	<b>2010</b>					
Total	100.0	100.0	100.0	100.0	100.0	100.0
Professional, technical	3.2	4.9	5.8	8.1	2.4	4.1
Administrative, managerial	0.6	1.6	0.7	3.3	0.6	1.1
Clerical worker	0.6	2.4	1.3	4.3	0.4	1.8
Services worker	8.1	4.5	10.5	4.3	7.4	4.5
Sales worker	8.0	18.1	4.4	22.6	9.0	16.8
Agriculture, forestry, fisheries	64.8	40.1	48.9	13.5	69.5	48.1
Production, transport laborer	14.0	26.7	26.5	40.2	10.4	22.7
Others	0.7	2.5	2.0	4.4	0.4	2.0

Source: Report on LFS, 2002-2003 and 2005-2006, 2010, BBS

Figure 2- Employed population aged 15 years and over by sex and residence, 1999-2010 (Million)

Period & source	National		Urban		Rural	
	Women	Men	Women	Men	Women	Men
1999-2000	7.9	31.1	2.0	6.7	5.9	24.4
2002-2003	9.8	34.5	2.5	8.3	7.3	26.3
2005-2006	11.3	36.1	2.7	8.6	8.6	27.5
2010	16.2	37.9	3.6	8.8	12.6	29.1

Source: Labour Force Survey, 2010, BBS

The sample size was 41. Compared to the population the sample size was small. This sample size might not represent the population. However, this sample will provide some idea about the participation of women in the procurement profession. To counter the small sample size, the researcher conducted expert interviews and case studies. The details of the data collection are provided in the survey finding analysis section of the paper

**5.2.7. Expert Interview:** No sampling technique was used for selecting the experts for the interviews. Experts were selected mainly from the development organizations who would have in-depth knowledge about the gender and HR issues. The details of the expert interview are provided under the expert interview analysis section.

### 5.3. TRIANGULATION

The researcher tried to triangulate the findings from the secondary data analysis, survey data and expert interviews through the entire report. Specific findings from each of the mechanisms used will be used to draw the conclusion and to test the hypothesis.

## 6. SECONDARY DATA ANALYSIS

### 6.1. PARTICIPATION OF FEMALE LABOR FORCE IN GLOBAL CONTEXT

#### 6.1.1. Overview:

There are significant and systematic differences between men's and women's jobs, whether across sectors, industries, occupations, types of jobs, or types of firms (the phrase "employment segregation by gender" refers to these differences). Women are more likely than men to work in agriculture (37 percent of all employed women, against 33 percent of all employed men) and in services (47 percent of all employed women, against 40 percent of all employed men). The opposite is true for manufacturing.<sup>1</sup> Women also are overrepresented among unpaid and wage workers and in the informal sector. Women account for about 40 percent of the total global workforce, but 58 percent of all unpaid work, 44 percent of wage employment, and 50 percent of informal employment.<sup>2</sup>

Because of care and other responsibilities, women are more likely than men to choose occupations that offer more flexibility and that do not require large or continual investments in skills unique to a firm or group of firms—or occupations where skills do not depreciate significantly because of career interruptions.<sup>3</sup>

Globally, women represent more than 50 percent of employment in communal services (public administration, education, health, and other social services) and among professionals (including teachers and nurses), clerical workers, and sales and service employees. They also represent more than 40 percent of employment—equivalent to the female share of total employment—in the retail and restaurant sectors and among agricultural workers.<sup>4</sup>

These gender differences in employment—with women more likely than men to work in sectors, industries, occupations, and jobs with lower average (labor) productivity—explain a large fraction of the gender gap in productivity and earnings.

The employment segregation by gender and the share of female jobs in segregated jobs are higher for bad jobs. More than 60 percent of all bad jobs are gender-specific. And of those, 25 to 35 percent are female jobs, compared with 15 to 30 percent of gender-specific good jobs. Finally, the difference in the share of gender-specific good and bad jobs that are female jobs is driven entirely by men's perceptions—in other words, men think that the fraction of gender-

specific jobs that are female is larger for bad jobs than for good ones, while women's perceptions do not vary much with the quality of the job.<sup>5</sup>

In most countries, whether a job is considered male, female, or neutral reflects traditional gender roles and perceptions. For example, men's jobs are usually technical (electrician, mechanic) and those that require physical strength. In many countries, high-skill jobs are also considered male jobs. In contrast, female jobs include retail and personal services, as well as domestic service. Many communities also mentioned "housewife" as a female job—even if unremunerated.<sup>6</sup>

### **6.1.2. Driving force for participation of women in work**

Changes in education have facilitated women's integration in the labor market. More educated women have traditionally exhibited higher participation rates than their less educated counterparts; so as education levels have increased around the world, more women have ventured into paid work. In Latin America, this increase in human capital explains 42 percent of the observed increase in female labor force participation since 1975.<sup>7</sup>

Similarly, changes in family formation have increased the labor market attachment for young women and women with small children. Marriage has traditionally been associated with a decline in female labor force participation, followed by further reductions once children are born. In the Arab Republic of Egypt, women who had just married in 1997 were 40 percent less likely to participate in the labor market than those to be married within a year of the survey (19 versus 29 percent), whereas 10 years later the gap between the two groups had narrowed substantially (32 and 27 percent, respectively), suggesting that some women rejoin the labor force several years after marriage.<sup>8</sup> Increases in the age of marriage and declines in fertility are thus likely to have contributed to higher participation rates in most countries and regions.

That said, the impact of economic development and changes in education and family formation on female labor force participation varies across individuals, countries, and regions and ultimately depends on institutions, formal and informal, as well as on individual preferences. Where changes in markets and institutions have aligned to strengthen incentives and erode constraints to participation, women have joined the labor force in large numbers. In contrast, where other constraints existed—particularly in informal institutions—or where market and institutional changes generated opposing forces, the impacts have been much more muted.

In addition, regulation of parental benefits and retirement can also affect female participation. Most countries provide some sort of maternity leave, but benefits vary considerably in the number of days, the percentage of leave that is paid, and who pays for it. Fewer countries provide paternity leave, often under more limited conditions. Differences in parental leave between men and women could increase the perceived cost of employing women and therefore diminish their employment opportunities. And while earlier retirement ages for women workers

have, in many cases, been motivated by protective instincts, they can create dis-parities in lifetime earnings, pension benefits, and career opportunities, thus discouraging women from market work.

A similar approach has assessed the motherhood penalty in hiring. Correll, Benard, and Paik found that single women were more likely to be called for interviews than single men, while childless women received 2.1 times more calls than equally qualified mothers.<sup>9</sup>

Finally, individual preferences for market work can also explain differences in participation rates across and within countries. Although culture and social norms within a country or particular group undoubtedly influence preferences, they nonetheless play an independent and distinct role through their impact on the household decision-making process. As was the case with social norms, more traditional individual attitudes and preferences are negatively correlated with participation in market work.<sup>10</sup>

## **6.2. PARTICIPATION OF FEMALE LABOR FORCE IN BANGLADESH CONTEXT**

### **6.2.1. Overview:**

Factors influencing female labor force participation have been usually conceptualized as supply side determinants. In the context of Bangladesh where the underemployment rate is high and social and attitudinal factors play important roles, female employment is expected to be linked to both push and pull factors.<sup>11</sup> Kabeer (2012)<sup>12</sup> highlights the role of such social factors in the female labor market.

Bridges et al. (2011)<sup>13</sup> examines the factors influencing female labor force participation rates (LFPR), highlighting the positive link between severity of poverty and the probability of women's LFP. In addition, it has looked at the influence of poverty and other factors on type/sector of employment. The above study has arrived at conclusions (listed below), which have important policy implications:

(a) Women from extreme poor households have a significantly higher probability of participation compared to non-poor. The difference between moderate poor and non-poor are insignificant.

(b) Poorer women are more likely to participate in low paid wage employment whereas the non-poor participate in self-employment.

(c) Presence of young children has a positive effect on self-employment and a negative effect on wage employment.

(d) Being married has a negative effect. This result may have been influenced by the fact that paid employment dominated by the RMG sector requires long hours of work. The study finds that there is a growing acceptance of outside employment among young unmarried workers.

## 6.2.2. Summary of findings on determinants of female labor force participation in Bangladesh <sup>14, 15, 16, 17</sup>

*Figure 3- Major findings from other researches*

Source	Major findings
Bridges et al. (2011)	<b>Participation in paid employment:</b> Extreme poor, those with smaller number of young children, unmarried are more likely to participate  <b>Participation in self-employment (agriculture):</b> Non-poor and young child has a positive impact. Education has no impact.
Amin (2005)	<b>Participation in paid employment:</b> Female-headed households, smaller family size, lower educational attainment, living in urban areas, lower levels of household wealth and microcredit have a positive impact on participation.
Rahman (2006)	<b>Participation in labour force (all types of employment):</b> Women as head, education SSC+, urban, unmarried have a positive impact. Land ownership, education lower than SSC, young children, and education of household head have a negative impact.
Khandker (1988)	<b>Women's home production labour input:</b> Women's education, husband's assets and landholding have negative effects; female wage has a positive effect.
Khandker (1987)	<b>Participation in cash income earning:</b> Education and female wage have a positive impact; husband's education has a negative impact

In the basic neo-classical theory, labor supply decision and labor force participation depends on the labor-leisure choice. In the basic model, the choice is derived from a utility function consisting of leisure and goods (and thus income). The basic predictions of neoclassical labor-leisure choice theory is that, as wage rises, labor supply will increase due to the substitution effect (opportunity cost of leisure rises). An income effect will work simultaneously and, if leisure is a normal good, its demand will fall and labor supply will rise with the rise in wage. A person, who just enters the labor force, will only be affected by the substitution effect and wage increases will raise the chance of participation.<sup>18</sup>

Mincer (1962) and later Becker (1965) brought the role of housework into the analysis of the participation of married women in the labor force and expanded the dichotomy between work and leisure choice to the pioneering concept of trichotomy of housework, leisure and market work. Although this approach faced the criticism that application of neo-classical framework to predict equalization of marginal utilities from various choices is somewhat tautological, or a statement of the obvious, and cannot go more in-depth into the analysis of the real choices related to home production. For example, 'when time is an input in the household production process, joint production is the rule and not an exception because the input of time into many household activities is itself a direct source of utility or disutility' (Pollak and Wachter 1975). Gronau (1986) considers this possibility and presents a model incorporating the direct utility/disutility of each type of activity. This approach is more relevant for female labor supply in Bangladesh, where casual wage employment may be associated with loss of social prestige,

while involvement in self-employment is not only prestigious but may also be congenial for joint production or, in other words, compatible with household activities.<sup>19</sup>

The theoretical developments actually imply that the relationship between women's labor market participation and other earning sources (male earners, unearned income, and asset-based production) may not follow the predictions from standard neo-classical theory. Keeping this in view, the role of standard predictions about the factors influencing women's labor force participation and the deviations have been discussed below and later tested empirically. In addition, the literature review has identified individual and household level variables that influence female LFPR.

**Supply Side of women labor force:** The economic factors correspond to the traditional labor-leisure choice. The opportunity cost of leisure is represented by wage, which is influenced by education and skill. Skill and family's productive assets incorporate substitution effect through the influence on productivity of self-employment activities. In addition to assets, non-earned income (e.g. spousal wages, remittances etc.) will also exert an income effect. Beckerian's 'home economics' dimension has been included through the last box on the right. Mincer's extension in the form of joint production and utility of self-employment versus wage employment has been included through factors affecting attitude and social status.<sup>20</sup>

**Demand side of women labor force:** The demand side has considerable overlap with variables influencing the supply side. In the interpretation of empirical results, the net impact of both sides has to be focused. For example, social norms, education and location are linked to both. In addition to the individual and household characteristics, the macro policies and macroeconomic variables will have strong influence on the demand side. The macroeconomic aspects of the demand side deserve in-depth analysis and will be taken up in a subsequent section. Some of the major individual/household characteristics featuring both supply and demand aspects has been elaborated below, both in general terms and as applied to Bangladesh.<sup>21</sup>

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### 6.3. FINDINGS FROM THE 2010 BANGLADESH LABOR FORCE SURVEY<sup>22</sup>

#### 6.3.1. Female Labor force growth:

Figure 4- Labor Force aged 15 years and over by sex and residence, 1995-2010

Period	National		Urban		Rural	
	Women	Men	Women	Men	Women	Men
1995-96	5.4	30.6	1.6	6.7	3.8	23.9
1999-2000	8.6	32.2	2.2	7.1	6.4	25.1
2002-2003	10.3	36.0	2.7	8.6	7.6	27.4
2005-2006	12.1	37.3	2.8	8.9	9.3	28.4
2010	17.2	39.5	4.0	9.3	13.2	30.2

Source: Labour Force Survey, 2010, BBS

Based on the findings from the Labor force survey it is notable that the female labor force in Bangladesh is increasing at a very high rate in last decade. In comparison with 2005-06, overall female labor force increased by 8.7% in 2010 in comparison to the male work force increase of 1.4%. It is notable that the population growth rate in the year 2011 was 1.37%. Hence, in comparison with the overall population growth, the growth rate female workforce can be considered significant. The labor force increase rates are illustrated below. In relation to the current study, this growth has significance as the increase in women in labor force may result in the increase of additional procurement/supply chain professionals. However, labor supply and demand depends on other variables as discussed in the section 6.2.

Figure 5- Labor force growth rate

Period and source	Annual compound growth rate (%)					
	Bangladesh		Urban		Rural	
	Women	Men	Women	Men	Women	Men
2002-03	6.5	3.8	7.6	6.7	6.2	2.9
2005-06	5.5	1.2	2.1	1.0	6.6	1.3
2010	8.7	1.4	8.5	1.1	8.7	1.5

Source: Labour Force Survey 2002-03, 2005-06, and 2010, BBS

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### 6.3.2. Education of the female labor force and impact of marriage:

Figure 6- Labor force participation aged 15 years and over by level of education, sex and residence in 2010

(In percentage)

Level of education	National		Urban		Rural	
	Women	Men	Women	Men	Women	Men
Total	100.0	100.0	100.0	100.0	100.0	100.0
No education	40.6	39.9	29.3	26.1	44.1	44.1
Class i-v	22.7	22.9	23.9	22.0	22.3	23.2
Class vi-viii	15.3	13.8	16.3	16.5	15.0	13.0
Class ix-x	10.5	8.3	10.7	9.1	10.5	8.0
SSC/equivalent	5.6	6.5	7.9	8.8	4.8	5.8
HSC/equivalent	3.0	4.0	6.0	6.9	2.1	3.1
Bachelor /equivalent	1.2	2.5	2.8	5.4	0.7	1.6
Master degree/equivalent	0.8	1.7	2.4	4.1	0.3	1.0
Medical/engineering	0.1	0.2	0.4	0.8	0.1	0.1
Technical/vocational	0.1	0.2	0.1	0.4	0.1	0.1
Others	0.0	0.0	0.1	0.0	0.0	0.0

Source: Labour Force Survey, 2005-06 and 2010, BBS

The table above clearly indicate that there is equal representation for men and women in terms of percentages are similar from no education level to class IX. There is dominance of men in SSC and HSC or equivalent levels. Interestingly, percentage wise women have half participation in comparison with men at bachelor or masters level. It is anticipated that most of the procurement professionals will enter the job after completing bachelors or masters degrees. In fact, this idea has been reinforced in the primary data survey which indicated that none of the procurement professionals have degrees below bachelors degree. Since women are clearly behind of men in terms of bachelors and masters degree, they will tend to get lesser job in procurement/supply chain or any other profession that require completion of bachelor or masters degree . This can probably be attributed to the socio-economic culture in the country which encourages girls to get married at the very tender age. When girls get married early, they tend to discontinue their studies because of the additional family responsibilities and to support the husband who would take the role of the primary bread winner in most of the cases. Mean age at marriage is 18.7 years for women as against 23.9 year for men. The following table shows that only 5.1% of the women who were married at the age below 15 could complete secondary school certificate. The table also indicate that only 19.3% women who were married between 15-19 years age could complete the secondary school certificate certification. Hence, it is clearly evident that early marriage is one of the main reason for the girls to discontinue higher studies which would ultimately affect the lower participation of professional jobs such as procurement/supply chain.

Percentage of women aged 15-49 in marriage before their 15<sup>th</sup> birthday, women aged 20-49 in marriage before their 18<sup>th</sup> birthday and women aged 15-19 currently married, by education status, 2006.

Figure 7- education and marriage

Educational status	No. of women aged 15-49 years	Percentage married before age 15	No. of women aged 20-49 years	Percentage married before age 18	No. of women aged 15-19 years	Percentage of women 15-19 years married
None	23812	50.2	22393	85.8	1419	60.9
Primary incomplete	9669	43.3	7898	84.3	1772	52.6
Primary complete	8286	35.5	6288	79.1	1997	54.1
Secondary incomplete	18917	18.5	10896	67.1	8021	38.8
Secondary completed or higher	8923	5.1	6900	29.5	2023	19.3
Non-standard curriculum	247	43.7	197	87.2	50	35.0

Source: Multiple Indicator Cluster Survey -2006, BBS

### 6.3.3. Regular paid employees and flexibility in the working hours:

As per the following data, the percentage of the regular paid employee is almost half of the men's percentage of regular paid employees. It is notable that most of the women tend to be unpaid family worker. With regard to earnings, it is difficult to determine the value of service rendered by the unpaid family members, particularly those services rendered by the unpaid female and the children. Such household members were not normally considered, as earners by the respondent and therefore, their income were likely to have been under reported. Women tend to work for unpaid and part-time works in our country because of the socio-economic culture. It is a common knowledge that women most of the take the role of housekeeping and children rearing. Even if they take up any formal paid job, they might still need to look after the family and children. This additional responsibility often restricts women from taking full time positions. There is further discussion about this phenomenon in the following section under literature review.

Figure 8- Comparison of different labor categories

Status of employment	National		Urban		Rural	
	Women	Men	Women	Men	Women	Men
	<b>2010</b>					
Total	100.0	100.0	100.0	100.0	100.0	100.0
Regular paid employee	8.9	17.0	24.0	32.9	4.5	12.2
Employer	0.2	0.2	0.1	0.3	0.2	0.2
Self Employed(agriculture)	15.7	25.8	6.2	6.5	18.5	31.6
Self Employed(non-agriculture)	9.4	21.7	8.4	27.3	9.7	20.0
Unpaid family worker	56.3	7.1	48.2	4.0	58.6	8.0
Irregular paid worker	1.8	3.1	4.4	6.3	1.1	2.2
Day labour/(Agriculture)	2.5	14.2	0.9	4.8	2.9	17.1
Day labour (Non-agriculture)	2.8	11.6	4.6	18.5	2.2	9.5
Servant	2.5	0.1	3.2	0.2	2.3	0.1

Source: Labour Force Survey 2010, BBS

The 2010 Labor Force Survey did not provide statistical data on the functional labor categories such as finance, human resource, technical, administration, procurement/supply chain, etc.

Rather, the survey concentrated on the industry such as agriculture, construction, mining, manufacturing, wholesale-retail business, etc. Hence, the industry specific data will not be very helpful for this particular research. However, it is notable that the participation of women in the “Administrative & support service activities” was only 0.27% as opposed to male participation of 1.17% in the same industry as per 2010 labor force survey. Procurement/supply chain is most likely fall into the administrative and support services activities. Hence, this also indicates that the participation of women in administrative activities is also low.

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## 7. PRIMARY DATA ANALYSIS

### 7.1. ANALYSIS OF THE SURVEY FINDINGS

#### 7.1.1. Background:

The researcher shared the survey questionnaires and expert interview questions were shared with the instructor on January 31, 2016. Initially it was decided that the researcher would use



both online survey mechanism and printed questionnaires to receive feedback from the procurement professionals. However, the researcher decided to use the online survey mechanism to minimize the survey biases and keep a standard practice. It is expected that most of the procurement professionals are well educated and have access to electronic communication media such as email, facebook, etc. Hence, the researcher collected the survey data using surveymonkey.com. The use of survey monkey allowed following benefits for the research:

- Data cannot be tempered or changed by the researcher or the associates because only the survey responder can edit and change the response not the researcher in the online system.
- It eliminates the requirement for providing verbal instructions on the research topic and expected response. Since a standard email/message was shared with the prospective responders, there was less chance for the biased response as opposed to using paper based questionnaires.
- The researcher made sure that one responder will not be able to provide duplicate responses. As the Internet Protocol (IP) addresses for each of the responders were tracked and notice for each of the responses, there was no chance for the duplication of answers.
- The surveymonkey.com has an automated data collection and summarization option for an extra fee. The option was not used by the researcher. Rather, data was retrieved manually and plugged in MS Excel and SPSS for the manual data analysis as required by the researcher.
- Surveymonkey.com tracked each responder's response time, date, duration of response, etc. which eliminated the data manipulation chances.
- It provided real time notification to the researcher when the responders provided responses which allowed the researcher to follow-up with the prospective responders (procurement professionals) accordingly so that they can provide the response.
- The researcher can easily share the survey link through email, facebook, SMS, linkedin, etc.
- The responders can easily answer the questions by using tick marks and radio box when applicable.

### **7.1.2. Difficulties in collecting the survey data:**

After conducting test survey and revising the questionnaire, the researcher sent out the survey link to women procurement/supply chain professionals in different organizations through email and facebook links. Emails and facebook messages were sent to at least 20 professionals on February 2016. The message requested the professionals to send the survey links to the other women procurement/supply chain professionals that they know. A sample communication with the prospective responder is kept in attachment A1. However, a total of three responses were received in the whole month of February 2016. It was anticipated that there is less number of women procurement/supply chain professionals in Bangladesh in comparison with men. Hence,

the survey link was initially shared with women professionals only so that responses can be received from the male professionals after matching the number of total responses from women professionals. Since there was very little response on the survey, the researcher decided to open the survey link to all known procurement/supply chain professionals. In addition, the researcher requested the prospective responders to share the link with their known women procurement/supply chain professionals so that there is an equal representation in the survey from male and women. The equal representation was considered to be very important as the topic itself is gender sensitive. To receive the maximum number of responses, the researcher shared the survey link and background to the following facebook pages, "Public Sector Procurement Professionals Bangladesh" (132 members), "Bangladesh Supply Chain Society (BSCS)" (2800+ followers), "Bangladesh Supply Chain Council" (1800+ members), etc. In addition, the researcher shared the link with all the MPSM students through email. Many of the students had the confusion that the survey was applicable only for the female procurement supply chain professionals. The misconception was later clarified through email correspondences. Based on the frequent follow-ups and persuasions, a total of 36 professionals responded to the questionnaires in March 2016. Based on further follow-ups and support from the known connections, an additional two professionals responded to the questionnaires by May 14, 2016. Hence, a total of 41 responses were received from the professionals 12 respondents were female (29.27%) and the remaining 29 respondents were male respondents. Though, the researchers tried level best with limited time to get equal response from female professionals, it was not possible. Considering the time factor and other research validation methods such as expert interviews and case analysis, the researcher went ahead with the data analysis with 41 responses (sample size).

### **7.1.3. Test Survey:**

The survey questions as drafted by the researcher on October 11, 2015 was shared with the two procurement professionals in January 2016 and they provided instant responses to the questions. Further to that, the researcher discussed with the two professionals to find out flaws, confusions, suggestions and comments on the research and questionnaires. The two professionals who provided responses on the test survey were Mr. Stanley Canton, Director, Office of Acquisition and Assistance (OAA), USAID Bangladesh and Mr. Abdullah Akbar, Deputy Office director in the same office. Based on their comments and suggestions, the researcher updated and edited the questionnaire. Both the initial draft questionnaire and revised questions are kept in attachment B.

### **7.1.4 Applicability of the questions and questions structures for the survey:**

1. Background Information: Seven fields were included in this question. The first field was the name of the professional which was kept optional. The respondents were allowed to submit the survey without mentioning the name. This allowed the respondents to provide response without any fear of identify disclosure. The second field was the current position of the respondents. This filed was kept to determine whether the respondents

actually belong to the procurement profession. The third field was about the years of experience of the respondents. This information will help to differentiate different variable such as their opinion regarding the participation of female procurement professionals. The fourth field was the name of the organization. This will help to determine whether the respondents belong to a profit or non-profit (NGO and Government) organizations. Also, this field will help to link the number of procurement/supply chain workers and relative participation of female workers. The fifth field required the respondents to provide their age in order to use it in relation to their opinions to see whether age makes any difference. The sixth field was about educational background which could give a trend regarding the type of educational backgrounds the procurement professionals have. The last and seventh field was about the gender which was an essential element for this survey as it is a gender sensitive topic.

2. Number of procurement supply chain professionals in the organization: This question requested the respondents to indicate the total number of the procurement/supply chain professionals so that a relative comparison can be done with the number of female professionals.
3. Number of female procurement/supply chain professionals in the organization: This question can be linked with second question and percentage of the female professionals can be found.
4. How and why a person choose/enter procurement profession: This question allowed the respondents to indicate how they came to the procurement profession. This question can identify whether there is any clear distinction among men and women to choose or enter the procurement profession.
5. Formal Procurement/Supply Chain experience before starting the procurement/supply chain career: This question will indicate whether the respondents had formal experience before entering the procurement/supply chain careers.
6. Formal procurement/supply chain education before starting the procurement/supply chain career: This question will help the researcher to find out whether the respondents had formal education before entering the procurement/supply chain profession.
7. Opinion of the respondents: There were eight fields comprising different topics and each of the field had five options which are as follows: strongly agree, agree, neutral, disagree, strongly disagree. The first field asked whether the respondents think that the participation of women in the procurement/supply chain profession is low in Bangladesh. This will give an idea what the professionals think about the overall representation of women in procurement/supply chain profession. This will reinforce the fact found from the question number three. The second field asked the question whether the respondent's organization has conducive environment for the female procurement/supply chain professionals. This will give an idea whether the respondents think that there is conducive environment for the female procurement/supply chain professionals. The third field asked the respondents to provide their opinion whether there is any stereotype for the participation of women in procurement/supply chain profession. This field can be linked with the second field. The fourth field requested the



respondents to provide opinion whether the male procurement/supply chain professionals are more efficient in comparison with their female counterparts in the context of their organizations. This will give an idea about the male versus female opinion as well as development versus for profit organizations. The fifth field requested the professionals to indicate whether there is any difference of effectiveness female participation of women in development versus for-profit organizations. The sixth field is essentially worded the same as the fourth field; however, effectiveness of female professionals was focused rather than the efficiency in this field. This will allow the researcher to compare and contrast the response from field number four and six. The seventh field requested the respondents to provide opinion whether having female procurement/supply chain professional helps an organization to be more effective. The response of this field should be the similar with the filed four and six. This field was kept to reinforce the opinions from the previous fields. The last and eighth field asked whether it is challenging for the female procurement professionals to work in the context of Bangladesh. This field will give an answer which can be linked with the first field and responses to the next two questions.

8. The reasons for women to perceive that procurement/supply chain profession is challenging: This question allowed the respondents to pick multiple answers out of the set answers. Also, this allowed the respondents to provide their own opinion in the fill in the blank. This question was kept open ended in order to make sure that the responded can provide their inputs in addition to the selectable options. This will give a valuable answer on people's input on the perceive challenges that prohibit women from choosing procurement/supply chain profession.
9. What can an organization do to allow effective participation women in procurement/supply chain profession: This question only allowed to pick one answer. However, the question allowed the respondents to provide their own response if the available options are not preferred. This question was kept open ended in order to make sure that the respondents can provide their inputs. Answer to this question can be used for the recommendation and conclusion regarding the issue.

### **7.1.5. Survey Data Analysis:**

**7.1.5.1. Findings from the Background Information (Question 1):** Followings are the findings from the background information:

- Out of total 41 respondents, 39 respondents are currently working and remaining two respondents are students.
- The 39 working professionals represent 28 different organizations. Two respondents represented Chevron Bangladesh, two respondents represented United Nations Development Program (UNDP), two respondents represented US Embassy (Department of State), nine represented United States Agency for International Development (USAID) and the remaining 24 respondents represented different organizations.

- Out of 41 respondents, 12 (29.27%) were female and remaining 29 (70.73%) respondents are male.
- Average professional experience of the 41 respondents was 10.90 and the experience ranged from zero years to 29 years.
- Average age of the respondents was 36.39 and the age of the respondents ranged from 24 years to 53 years
- All of the respondents at least has a bachelors/BA degree. Out of the 41 respondents, 11 (26.82%) respondents have bachelors/BA degree and remaining 30 respondents (73.17%) have masters/MA degree or above.

**7.1.5.2. Participation of women in procurement profession (question no. 2 and 3):** Based on the background information provided by the respondents in response to question no.1, the researcher differentiated respondents in three major binomial categories to understand and distinguish the difference between participation of women in development sector (third sector) as opposed to other sectors. Out of the 41 respondents, 2 respondents were full time students and they do not represent any type of organizations. Another respondent did not provide data on the number of total procurement/supply chain staff members and female procurement/supply chain members. Hence, data from those three respondents were excluded for further analysis of this particular section leaving the sample size of 38. In addition, multiple respondents provided number of total procurement/supply chain staff members and female procurement/supply chain staff members in response to the question no. 2 and 3. On many occasions, numbers given for the same organization varied significantly. Hence, if there are multiple respondents from the same organization, provided numbers were averaged to come up with a reasonable estimate. Following paragraphs provide analyses on the relative participation of female procurement/supply chain professions in different types of organizations. Since, respondents provided related number of procurement/supply chain professionals for 27 organizations, the analysis was conducted based on the 27 data points (sample organizations) as follows:

Number	(Q1) Background Information					(Q 2) How many Procurement/ supply chain professionals do you have in your organization	(Q 3)How many female procurement/ supply chain professional(s) do you have in your organization?
	Name of the organization	Type of the organization (profit vs non-profit)	Type of the organization (Development vs for-profit vs Government)	Type of the organization (Development vs other)	Gender		
1	Agriculture Information Service	Non-profit	Government	Other	Male	6	1

	(AIS), Ministry of Agriculture (MoA), Banglades h.						
2	Anwar Group of Industries	Profit	Profit	Other	Male	27	4
3	BARI (IDB)	Non- profit	Governm ent	Other	Male	3	0
4	Bata Banglades h	Profit	Profit	Other	Male	25	0
5	BBC	Non- profit	Governm ent	Other	Male	3	1
6	Chevron Banglades h	Profit	Profit	Other	Fem ale	130.5	9.5
7	DBL Ceramics	Profit	Profit	Other	Male	5	0
8	DPE	Non- profit	Governm ent	Other	Male	2	0
9	Gemicon Group	Profit	Profit	Other	Male	25	0
10	GrameenP hone	Profit	Profit	Other	Male	85	13
11	Hamko Footwear (Hamko Group)	Profit	Profit	Other	Male	3	0
12	Internation al Committee Of the Red Cross	Non- profit	Develop ment	Develop ment	Male	1	0
13	Islamic Relief Worldwide	Non- profit	Develop ment	Develop ment	Fem ale	4	2
14	Labaid Group	Profit	Profit	Other	Male	42	9
15	LGED,	Non-	Governm	Other	Male	50	8

	GOB	profit	ent				
16	Rancon Motorbikes Limited (Rangs Group)	Profit	Profit	Other	Male	5	1
17	Ranks Petroleum Limited (Shell Bangladesh)	Profit	Profit	Other	Male	15	0
18	Reliance Footwear & Tannery Ltd	Profit	Profit	Other	Male	6	0
19	Saguna Food and Feeds Bangladesh Pvt. Limited	Profit	Profit	Other	Male	3	0
20	Share and Care Group	Profit	Profit	Other	Male	2	0
21	Social Marketing Company	Non-profit	Development	Development	Male	10	1
22	Swiss Red Cross	Non-profit	Development	Development	Male	2	0
23	The Bengal Glass Works Ltd	Profit	Profit	Other	Male	7	0
24	The Ibn Sina Pharmaceuticals Ltd	Profit	Profit	Other	Male	13	0
25	UNDP	Non-profit	Development	Development	Female	4	2
26	US Embassy,	Non-profit	Government	Other	Female	9	3

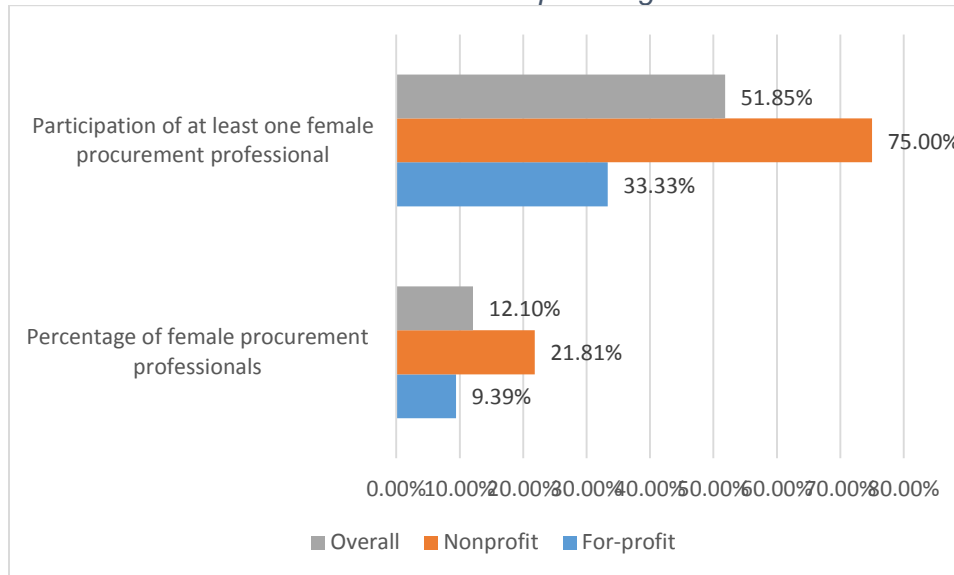
	Dhaka						
27	USAID Bangladesh	Non-profit	Development	Development	Female	16.44	6.44
<b>Total</b>						<b>503.94</b>	<b>60.94</b>

Analysis under this section are divided in three subsections as follows:

**Profit vs non-profit:** For this exercise, profit, for-profit and corporate sector is used interchangeably to distinguish the organization that has the primary motive of making profit as per the type of the organization. On the other hand, non-profit organizations could include both government and non-government organization that do not consider profit making as their primary motive. As per this count, out of 27 organizations, 12 organizations (44.44%) were non-profit organizations and remaining 15 organizations were for-profit (55.56%). 12 non-profit employed a total of 110 procurement/supply chain professionals and 24 professionals are female (21.81%). On the other hand, 15 for-profit organizations employed a total of 394 procurement/supply chain professionals and 37 professionals (9.39%) were female out of those total employees. Out of the 12 non-profit organizations, four organizations did not employ any female procurement supply chain professionals. Hence, in terms of representation, 75% non-profit organizations at least had one female procurement/supply chain professionals. On the other hand, the respondents indicated that 10 for-profit organizations did not have any female representative out of the total 15 for-profit organizations. Hence, it implicates that only 33.33% of the for-profit organization had at least one female representative. Overall, there were 61 female procurement/supply chain professionals in 27 organizations out of total 504 professionals which is 12.10%. Hence, the 27 data sets clearly indicate that non-profit organizations employ more female procurement/supply chain professionals than the for-profit organizations.

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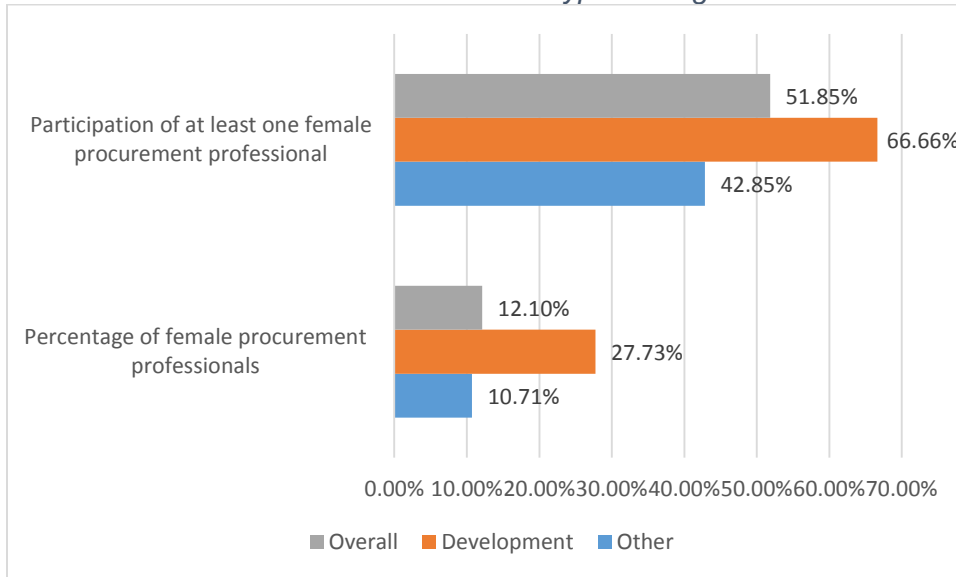
Figure 9- A comparison of participation of female procurement professionals in for-profit and non-profit organizations



**Development vs. other:** For this exercise, development organizations are those non-profit organizations that work for the development of the society. On the other hand, the other type of organization category includes both for-profit and government organizations. As per this count, out of 27 organizations, six (6) organizations (22.22%) were development organizations and remaining 21 organizations were other types (77.78%). 6 development organizations employed a total of 37 procurement/supply chain professionals and 11 professionals were female (29.73%). On the other hand, 21 other types of organizations employed a total of 467 procurement/supply chain professionals and 50 professionals (10.71%) were female out of those total employees. Out of the six (6) development organizations, two organizations did not employ any female procurement supply chain professionals. Hence, in terms of representation, 66.66% development organizations at least had one female procurement/supply chain professionals. On the other hand, the respondents indicated that 12 other types of organizations did not have any female representative out of the total 21 organizations. Hence, it implicates that only 42.85% of the other types of organization had at least one female representative. Overall, there were 61 female procurement/supply chain professionals in 27 organizations out of total 504 professionals which is 12.10%. Hence, the 27 data sets clearly indicate that development organizations employ more female procurement/supply chain professionals than other types of organizations.

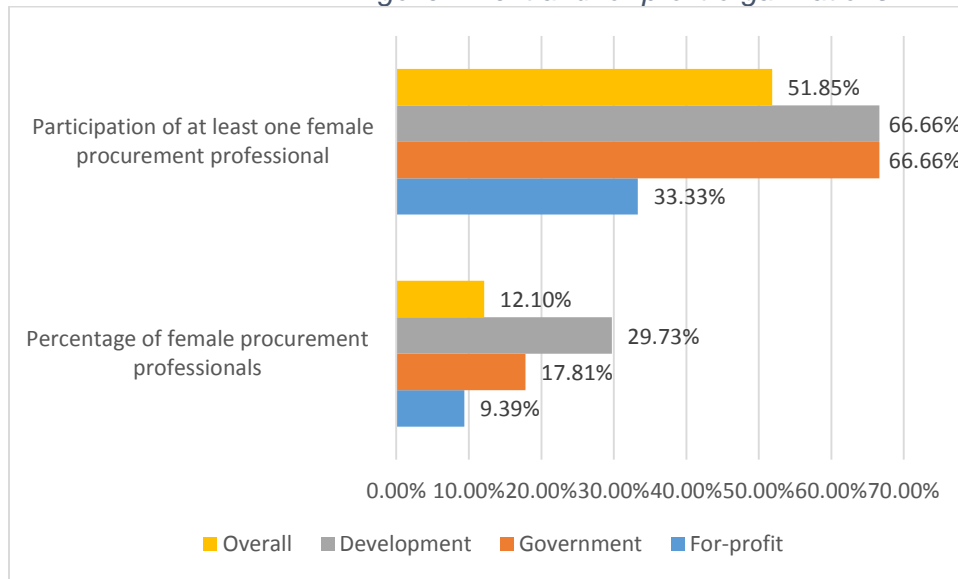
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Figure 10- A comparison of participation of female procurement professionals in development and other types of organizations



**Development vs. for-profit vs. government:** For this exercise, development organizations are those non-profit organizations that work for the development of the society. For the purpose of this study, the government organizations are not either development or profit oriented. For-profit organizations are profit oriented organizations. As per this count, out of 27 organizations, six (6) organizations (22.22%) were development organizations, six (6) organizations (22.22%) were government organizations and remaining 15 organizations were for-profit by nature (55.56%). Six development organizations employed a total of 37 procurement/supply chain professionals and 11 professionals were female (29.73%). Six government organizations employed a total of 73 procurement/supply chain professionals and only 13 of them were female (17.81%). On the other hand, 15 for-profit organizations employed a total of 394 procurement/supply chain professionals and 37 professionals (9.39%) were female out of those total employees. Out of the six (6) development organizations, two organizations did not employ any female procurement supply chain professionals. Hence, in terms of representation, 66.66% development organizations at least had one female procurement/supply chain professionals. Out of six government organizations, two organizations did not have any female procurement representative which refers that 66.66% of the government organization had at least one female procurement/supply chain representative. On the other hand, the respondents indicated that 10 for-profit organizations did not have any female representative out of the total 15 for-profit organizations. Hence, it implicates that only 33.33% of the for-profit organization had at least one female representative. Overall, there were 61 female procurement/supply chain professionals in 27 organizations out of total 504 professionals which is 12.10%. Hence, the 27 data sets clearly indicate that development organizations employ more female procurement/supply chain professionals compared to both government and for-profit organizations.

Figure 11- A comparison of participation of female procurement professionals in development, government and for-profit organizations



Based on the above analysis on 27 different organizations in Bangladesh, it is clear that development organizations recruit and employ more female procurement/supply chain professionals in comparison to other organizations such as government and for-profit (corporate sector) organizations.

#### **7.1.5.3. Process of transition into the Procurement profession (question 4):**

Followings are the responses to the question no. 4 which asked how and why the respondents choose/enter the procurement/supply chain profession.

- Procurement in any format is important for the organization
- in 2013 I participated in a competition which was on SCM. Afterwards I was interested in studying this subject and finally decided to take a professional degree - CSCA when I was in 3rd year of BBA. After completing BBA I decided to study Masters in this subject as I loved studying it.
- It is a knowledgeable job
- Started the career as procurement professional
- It is a rewarding area to work with
- Challenging and dynamic
- Through official upgradation
- Coincidence and job switching
- Procurement is challenging profession
- I am working as Executive Engineer in LGED HQ. I do all the e-procurement function in Northern Bangladesh Integrated Development Project funded by JICA
- It is my routine work
- policy background with desire to serve overseas. Contracting Officer is a good



complement to my background.

- Want to build up future career in SCM Pharma line
- Because this profession is challenging and gives opportunity to learn
- This position is creating more opportunity in Bangladesh
- As a new arena of business
- It's a booming sector and have opportunity to create better profession screen
- Professional expertise and previous experience
- There is a huge opportunity to take new challenge. Better scope of career development than other profession
- To work for the coastal belt people (indirectly) through procurement
- Depend on the opportunity
- It is a challenging field, can explore many things continuously
- Because of the global prospect of procurement or SCM
- Procurement is starting to get recognition as a major contributor to company growth. In fact, as the economy continues to present a bleak outlook, chief procurement officers (CPOs) are becoming increasingly important members of the boardroom.
- Better future
- The profession is a wonderful way to help an organization
- I started my career in MIS and later transferred to Supply Chain
- By competition. New and special work in BD, another things is that procurement activity can value add
- Now a day procurement is starting to get recognition as a major contributor to company growth. As a business graduate I have always had an interest in number, program (development) and negotiation. So, I feel this profession is perfect combination of three areas. Procurement is also an extremely challenging career and this part attracts me for this profession as I always love to take challenge.
- It is challenging
- Challenging and exiting
- I have entered into procurement because of having the first hand opportunity immediately after completing my graduation. But I stayed in this profession because of the challenges, diversity and opportunity as good professional career in future.
- Transfer from another department
- Through interview and academic qualification
- Trying to be enter the procurement
- As usual as for learn to make own business in future
- Better opportunity to build myself
- It was a job in MNC
- It is hard working area
- My first job included procurement functions
- I Good opportunity to work on procurement related job and shifted from other discipline

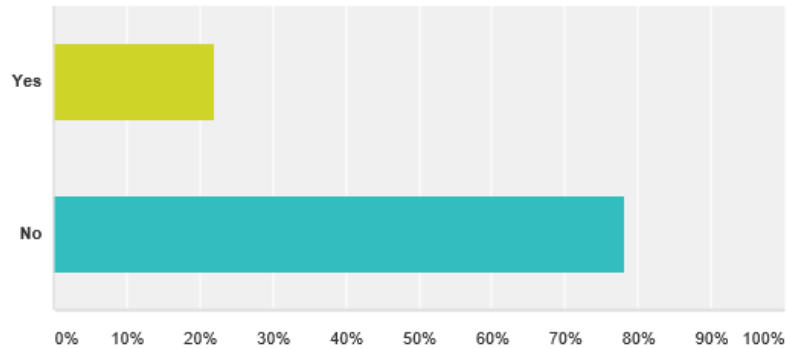
Rather than using any statistical scales, the comments from the respondents were analyzed to see whether there is any trend. It is notable that many of the respondents did not provide answers according to the question. In addition, many respondents had difficulties in communicating their experience in proper English. Hence, the researcher emphasized on the key words rather than complete sentences. At least nine (9) of the respondents mentioned challenging profession as one of the reason why they picked procurement/supply chain profession. Both male and female respondents mentioned about the challenging elements as the reason for picking the profession. Secondly, at least six (6) respondents mentioned about better prospects of procurement/supply chain profession. Two (2) respondents mentioned that they joined the profession because of internal transfer. At least three (3) respondents mentioned that they picked the profession because their skills sets and education matched with the procurement/supply chain profession. The response from 12 female respondents were carefully reviewed to see whether there is any specific trend or specific reason for them to come in to the procurement profession. Also, the responses from development and for-profit organizations were reviewed to find specific distinctions. However, there is no specific trend for the gender and type of organization.

#### **7.1.5.4. Formal procurement/supply chain experience (question 5):**

Question No. 5 asked the respondents to confirm whether they had any formal procurement/supply chain experience before starting their procurement/supply chain career. In response to this question, nine (9) respondents out of total 41 respondents mentioned that they had prior formal procurement/supply chain experience before they started their procurement/supply chain career. In terms of percentage 21.95% respondents confirmed that they had formal procurement/supply chain experience. The remaining 78.05% respondents confirmed that they did not have any formal procurement/supply chain experience. As such, it is clear that most of the respondents did not have prior formal experience in procurement/supply chain before they joined the procurement/supply chain profession. According to the gender disaggregated data, 83.33% female respondents did not have any prior formal experience in procurement/supply chain as opposed to 75.86% male respondents who said they did not have formal procurement/supply chain experience before entering the profession. This signifies that more male professionals were able to get procurement/supply chain jobs without having any formal procurement/supply chain experience in comparison with their female counterparts. Hence, men will often get more priority in terms of getting a procurement/supply chain job even if they do not have any formal procurement supply chain job.

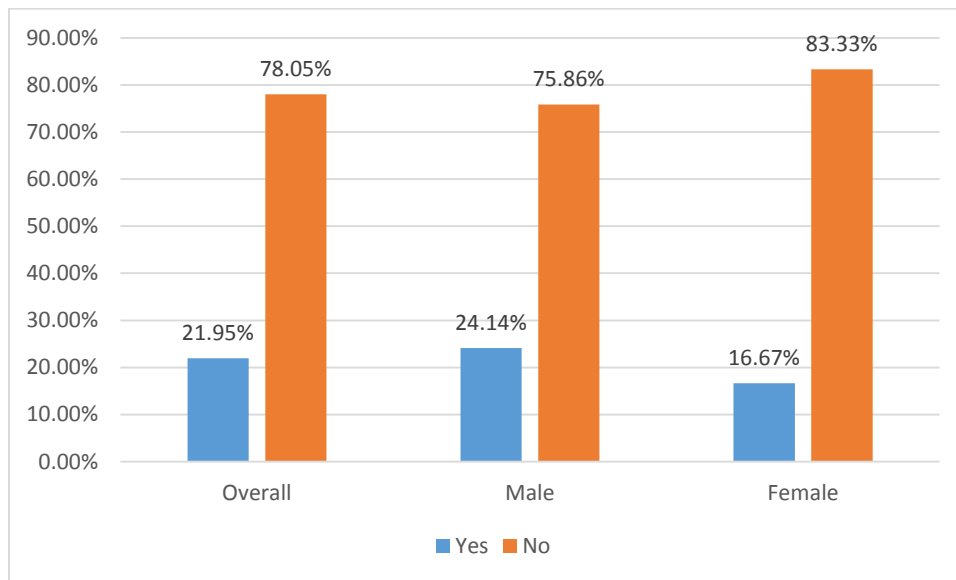
### Did you have any formal procurement/supply chain experience before starting your procurement/supply chain career?

Answered: 41 Skipped: 0



Answer Choices	Responses	Count
Yes	21.95%	9
No	78.05%	32
Total		41

Figure 12- Prior formal experience in procurement/supply chain



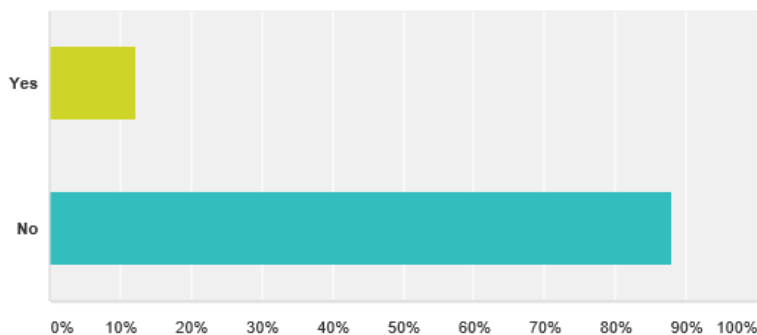
#### **7.1.5.5. Formal procurement/supply chain education (question 6):**

Question No. 6 asked the respondents to confirm whether they had any formal procurement/supply chain education before starting their procurement/supply chain career. In response to this question, only (5) respondents out of total 41 respondents mentioned that they

had prior formal procurement/supply chain education before they started their procurement/supply chain career. In terms of percentage, 12.20% respondents confirmed that they had formal procurement/supply chain experience. The remaining 87.80% respondents confirmed that they did not have any formal procurement/supply chain experience. As such, it is clear that most of the respondents did not have prior formal education in procurement/supply chain before they joined the procurement/supply chain profession. After analyzing the data for those respondents who said they had prior education, it was observed that one of the respondent was still a student and did not have a procurement/supply chain job when the response was provided. Another respondent indicated that he was a student of the MPSM program which is the only formal professional master's degree for the procurement/supply chain professionals in Bangladesh. Two other respondents are government employees and it is expected that government provide training to their staff members before they are actually assigned procurement functions. According to the gender disaggregated data, 83.33% female respondents did not have any prior formal education on procurement/supply chain as opposed to 93.10% male respondents who said they did not have formal procurement/supply chain education before entering the profession. This signifies that more female professionals were able to get procurement/supply chain jobs without having any formal procurement/supply chain education in comparison with their male counterparts.

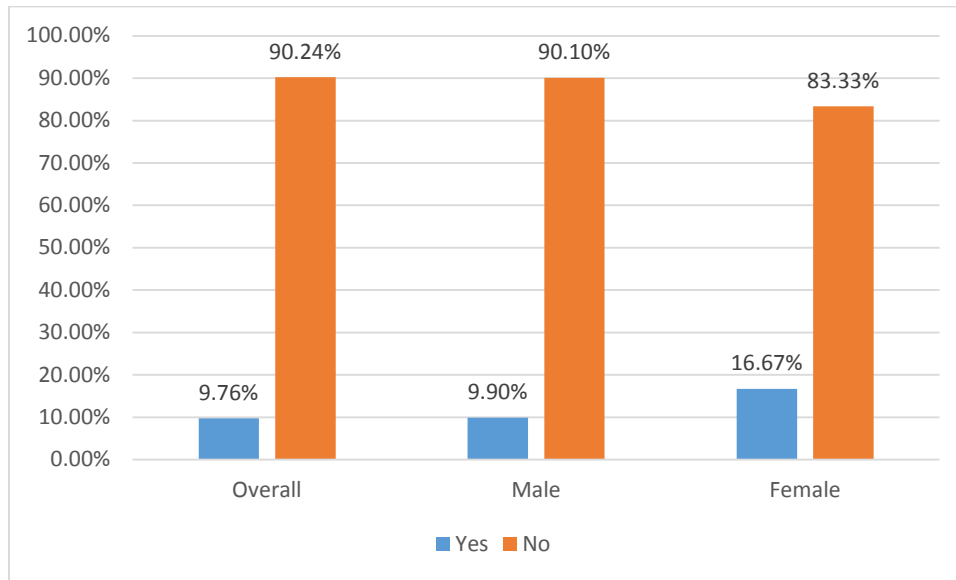
**Did you have any formal procurement/supply chain education before starting your procurement/supply chain career?**

Answered: 41 Skipped: 0



Answer Choices	Responses	
Yes	12.20%	5
No	87.80%	36
Total		41

Figure 13- Prior Formal educations in procurement/supply chain



**7.1.5.6. Analysis of opinions (question 7):**

(Codes: Strongly Agree = 1, Agree=1, Neutral=3, Disagree=2 and Strongly Disagree=5)

**Question 7.a: Participation of women in procurement/supply chain profession**

	1 = Strongly Agree –	2 = Agree –	3 = Neutral –	4 = Disagree –	5 = Strongly Disagree –	Total –	Weighted Average –
<b>Do you think that the participation of women in procurement/supply chain profession is low in Bangladesh?</b>	56.10% 23	39.02% 16	4.88% 2	0.00% 0	0.00% 0	41	1.49

**Overall Data Analysis:** It is clearly evident that most of the procurement professionals strongly believe (56.10%) that participation of women is low in Bangladesh. Overwhelming 95.12% respondents either strongly agrees or agrees that the participation of women in procurement/supply chain is low in Bangladesh. It is notable that the question did not specify the standard or definition of “low”. However, it is assumed that the standard would be the participation of women in other countries and low would be considered in relation to the relative participation of men in the same profession.

**Gender disaggregated data analysis:** Surprisingly, the weighted average rating for the 12 female professionals was 1.58. However, 29 male professionals had a weighted average of 1.45 which was marginally lower than the total weighted average of 1.49. It is notable that out of 12 female respondents, majority of the respondents agreed (58.33%) as opposed to strongly agreed (41.67%). In comparison, out of 29 male respondents, 18 respondents strongly agreed (62.06%), 9 respondents agreed (31.03%) and remaining 2 respondents (6.9%) were neutral while providing their opinion on this question. Hence, male respondents are more likely to believe that there is less low participation of women in procurement/supply chain profession in comparison with the female respondents.

**Question 7.b: Conducive work environment for the female procurement/supply chain professionals**

	1 = Strongly Agree –	2 = Agree –	3 = Neutral –	4 = Disagree –	5 = Strongly Disagree –	Total –	Weighted Average –
<b>Do you think that your organization has conducive work environment for the female procurement/supply chain professionals?</b>	36.59% 15	29.27% 12	19.51% 8	12.20% 5	2.44% 1	41	2.15

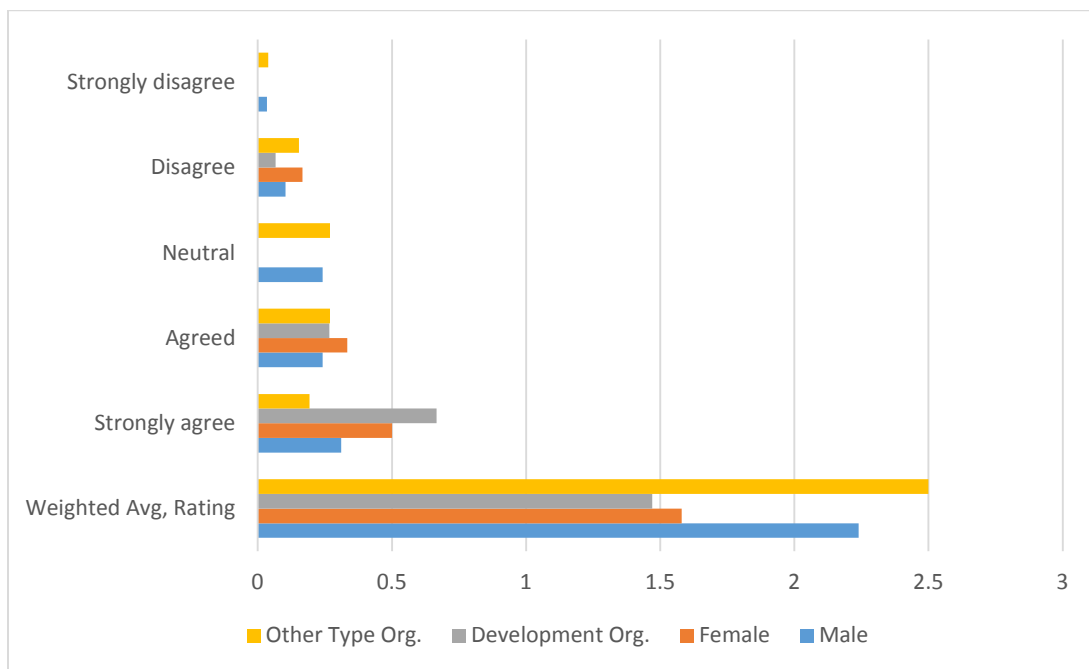
**Overall data analysis:** Weighted average rating for this question was 2.15 which will fall into the agree category. Hence, most of the professionals agreed that they have conducive work environment for the female professionals. However, 14.64% respondents (6 respondents) either disagree or strongly disagree that their organizations had conducive work environment for female professionals. 19.51% (8 respondents) gave neutral rating and remaining 65.86% either agreed or strongly agreed.

**Gender disaggregated data analysis:** Surprisingly, the weighted average rating for the 12 female professionals was 1.58. However, 29 male professionals had a weighted average of 2.24 which was higher than the total weighted average of 2.15. It is notable that out of 12 female respondents, 50% of the respondents strongly agreed and 33.33% agreed that their organization had conducive work environment for the female professionals. Only 16.67% female respondents disagreed that their organizations have conducive work environment for female professionals. In comparison, out of 29 male respondents, 9 strongly agreed (31.03%), 7 agreed (24.13%), 7 remained neutral (24.13%), 3 disagreed (10.34%) and remaining 1 (3.44%) strongly disagreed. Hence, male respondents were more negative in comparison to their female

counterparts while providing opinion on the conduciveness of work environment for the female professionals.

**Difference between development and other organizations:** The weighted average rating of 15 professionals who work in the development organization was 1.47. On the other hand, 26 professionals from other types of organizations had a weighted average rating of 2.5 for this topic. Out of 15 development professionals, 66.67% (10) respondents strongly agreed and 26.67% (4) agreed that their organizations had conducive work environment for the female procurement/supply chain professionals. Only 6.67% (1) respondent disagreed that his/her organization had a conducive work environment for the female professionals. In comparison, out of 26 professionals from other type of organizations, 19.23% (5) strongly agreed, 26.92% (7) agreed, 26.92% (7) remained neutral, 15.39% (4) disagreed and 3.85% (1) strongly disagreed that their organizations had conducive work environment for the female procurement/supply chain professionals. Hence, it is clearly evident that the development professionals think that their organizations have more conducive work environment for the female procurement/supply chain professionals in comparison to the other types of organizations.

Figure 14- Comparison of opinion regarding the conducive environment for the female professionals



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**Question 7.c: Gender stereotype for the female procurement/supply chain professionals**

	1 = Strongly Agree –	2 = Agree –	3 = Neutral –	4 = Disagree –	5 = Strongly Disagree –	Total –	Weighted Average –
Do you think that there is gender stereotype for the women procurement/supply chain professionals?	12.20% 5	26.83% 11	46.34% 19	9.76% 4	4.88% 2	41	2.68

**Overall data analysis:** Weighted average rating for this question was 2.68 which will fall into the neutral category. A total of 19 (46.34%) respondents provided neutral rating that there was gender stereotype for the female procurement/supply chain professionals. However, 39.03% respondents (16 respondents) either strongly agreed or agreed that there was gender stereotype for the female professionals. Remaining 14.64% respondents (6) either disagreed or strongly disagreed that there was gender stereotype for the female professionals.

**Gender disaggregated data analysis:** Surprisingly, the weighted average rating for the 12 female professionals was 2.75. However, 29 male professionals had a weighted average of 2.65 which was slightly lower than the total weighted average of 2.68. It is notable that out of 12 female respondents, 8.33% of the respondents strongly agreed and 33.33% agreed that there was gender stereotype for the female professionals. 41.67% female respondents were neutral regarding this question. Only 16.67% female respondents either disagreed or strongly disagreed that there was gender stereotype for female professionals. In comparison, out of 29 male respondents, 4 strongly agreed (13.79%), 7 agreed (24.13%), 14 remained neutral (48.27%), 3 disagreed (10.34%) and remaining 1 (3.44%) strongly disagreed. Hence, the male respondents were more agreeable to the concept that there was gender stereotype in comparison to their female counterparts.

**Question 7.d: Efficiency of male procurement professionals in comparison with the female**

	1 = Strongly Agree –	2 = Agree –	3 = Neutral –	4 = Disagree –	5 = Strongly Disagree –	Total –	Weighted Average –
Do you think that male procurement professionals are more efficient compared to the female	12.20% 5	19.51% 8	12.20% 5	43.90% 18	12.20% 5	41	3.24



	1 = Strongly Agree –	2 = Agree –	3 = Neutral –	4 = Disagree –	5 = Strongly Disagree –	Total –	Weighted Average –
female, in the context of your organization?							

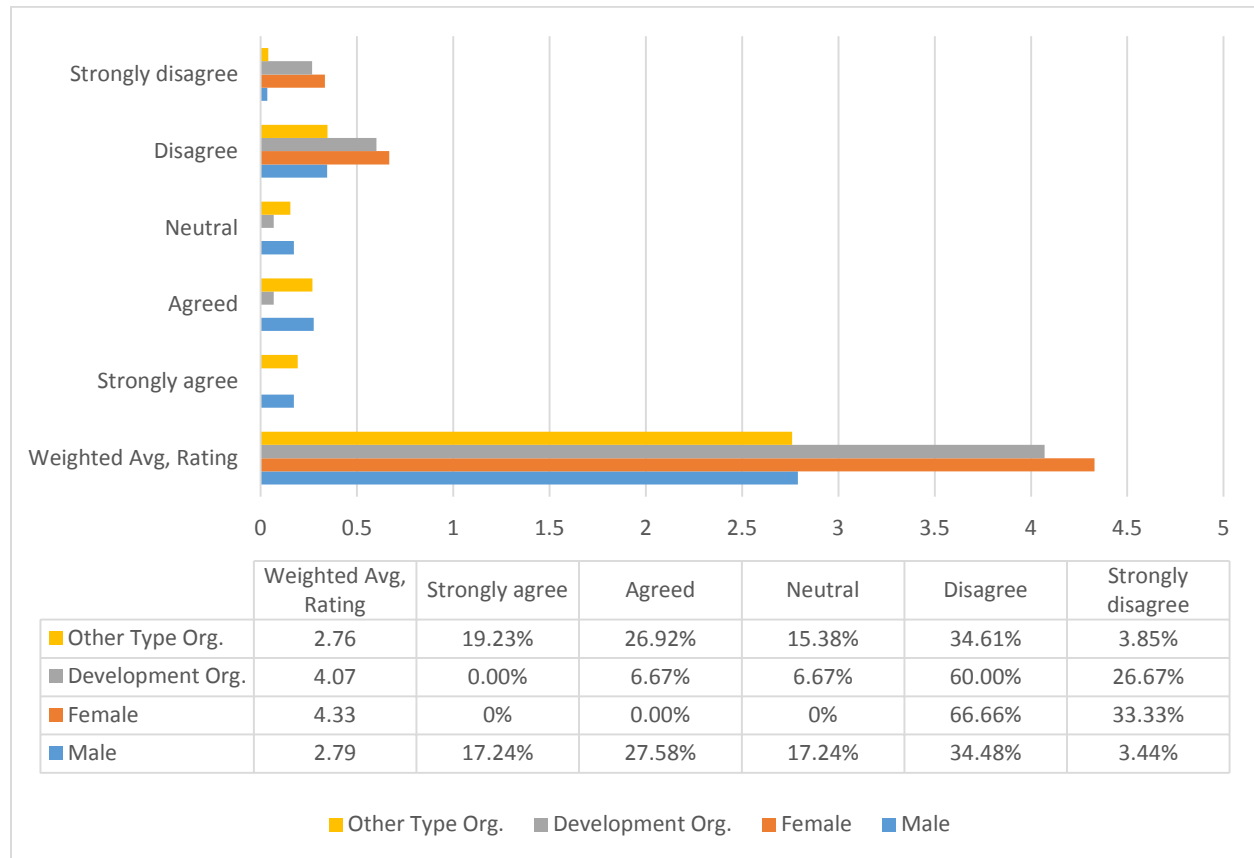
**Overall data analysis:** Weighted average rating for this question was 3.24 which will fall into the neutral category. However, majority of the professionals (56.1%) either disagreed or strongly disagreed that male professionals were more efficient than female in the context of their organizations. 12.20% respondents (5 respondents) provided neutral rating to this question. A significant 31.70% respondents (13) either strongly agreed or agreed that male professionals were more efficient than female professionals in the context of their organizations.

**Gender disaggregated data analysis:** Interestingly, the weighted average rating for the 12 female professionals was 4.33 which was higher than the weighted average rating of 3.24. However, 29 male professionals had a weighted average of 2.24 which was much lower than the total weighted average of 3,24. It is notable that out of 12 female respondents, 33.33% of the respondents strongly disagreed and 66.66% disagreed that male procurement/supply chain professionals were more efficient in comparison with the female professionals in the context of their organizations. It is notable that no female professional strongly agreed, agreed or provided neutral rating on this question. In comparison, out of 29 male respondents, 5 strongly agreed (17.24%), 8 agreed (27.58%), 5 remained neutral (17.24%), 10 disagreed (34.48%) and remaining 1 (3.44%) strongly disagreed. Hence, it is clearly evident that female professionals gave a very strong opinion that male professionals are not more efficient than female in the context of their organizations. However, male professionals provided a rather mixed response regarding the efficiency of male procurement/professionals in comparison with the female professionals in the context of their organizations.

**Difference between development and other types of organizations:** The weighted average rating of 15 professionals who worked in the development organization was 4.07. On the other hand, 26 professionals from other types of organizations had a weighted average rating of 2.76 for this topic. Out of 15 development professionals, 26.67% (4) respondents strongly disagreed and an overwhelming 60% (9) disagreed that male procurement/supply chain professionals were more efficient in comparison with the female professionals. Only 6.67% (1) respondent provided neutral rating and remaining 6.67% (1) respondent agreed on this question. It is notable no development professional provided strongly agreed rating on this topic. In comparison, out of 26 professionals from other type of organizations, 19.23% (5) strongly agreed, 26.92% (7) agreed, 15.38% (4) remained neutral, 34.61% (9) disagreed and 3.85% (1) strongly disagreed that male procurement/supply chain professionals were more efficient in comparison with the female professionals in the context of their organizations. Hence, it is clearly evident that the development professionals think that male professionals are not more

efficient in comparison with the female professionals in the context of their organizations. However, the professionals from other types of organizations gave mixed response on this question.

Figure 15- Comparison of opinion regarding the effectiveness of male professionals



**Question 7.e: Effectiveness of women in development sector in comparison to the corporate sector**

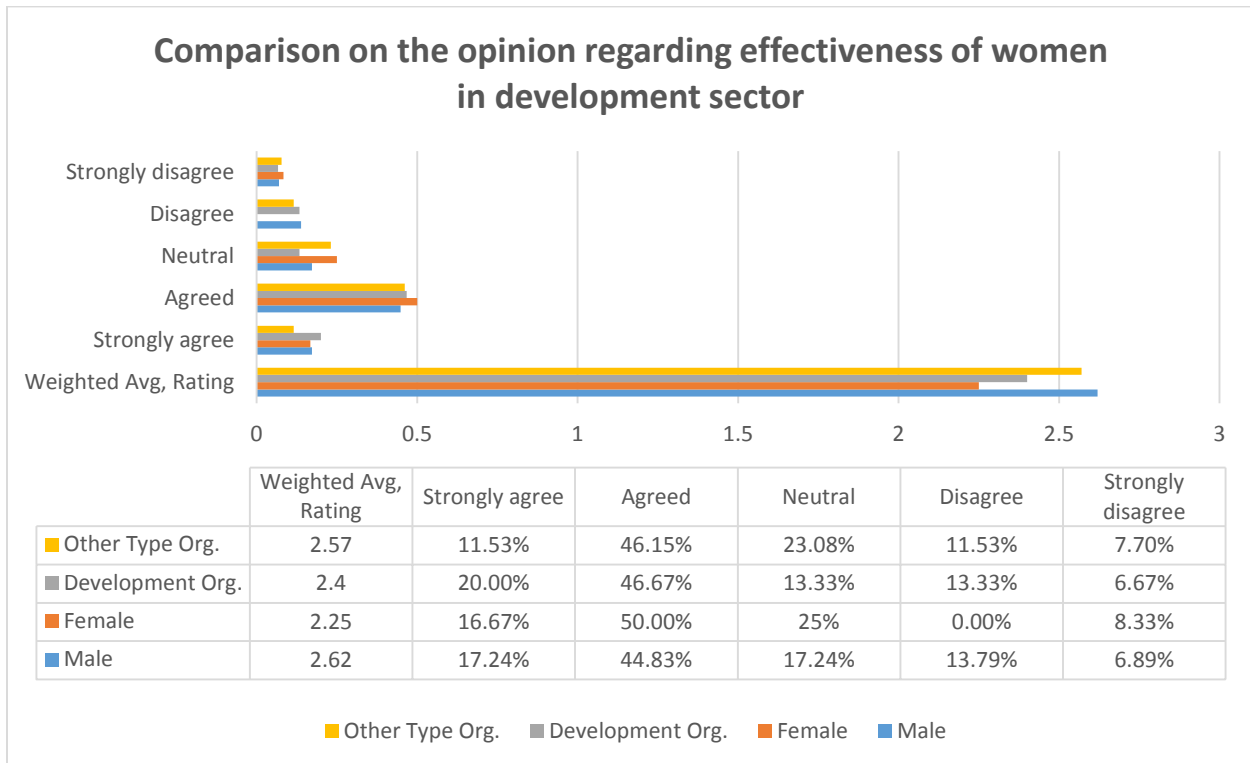
	1 = Strongly Agree	2 = Agree	3 = Neutral	4 = Disagree	5 = Strongly Disagree	Total	Weighted Average
Do you think that women could be more effective in the development organizations (the third sector) in comparison with the corporate sector (for-profit organizations)?	14.63% 6	46.34% 19	19.51% 8	12.20% 5	7.32% 3	41	2.51

**Overall data analysis:** Weighted average rating for this question was 2.51 which will fall between neutral and agree categories. However, majority of the professionals (60.98%) either agreed or strongly agreed that women could be more effective in development sector in comparison with the corporate sector. 19.51% respondents (8 respondents) provided neutral rating to this question. Only 19.51% respondents (8) either strongly disagreed or disagreed that women could be more effective in the development sector in comparison to the corporate sector.

**Gender disaggregated data analysis:** The weighted average rating for the 12 female professionals was 2.25 which was lower than the total weighted average of 2.51. However, 29 male professionals had a weighted average of 2.62 which was higher than the total weighted average of 2.51. It is notable that out of 12 female respondents, 16.67% of the respondents strongly agreed and 50% agreed that women could be more effective in the development organizations in comparison with the corporate sector. 25% female professionals provided neutral rating and remaining 8.33% female respondent strongly disagreed with regards to the fact that women could be more effective in development organizations in comparison with the corporate sector. In comparison, out of 29 male respondents, 5 strongly agreed (17.24%), 13 agreed (44.83%), 5 remained neutral (17.24%), 4 disagreed (13.79%) and remaining 2 (6.89%) strongly disagreed. Hence, it is clearly evident that female professionals are more likely to believe that female professionals are more effective in development sector in comparison with the corporate sector. It is notable that majority of male and female respondents either agreed or strongly agreed that female professionals are more effective in development organizations in comparison with the corporate sector. The opinion is more prevalent among female professionals in comparison with the male professionals.

**Difference between development and other types of organizations:** The weighted average rating of 15 professionals who worked in the development organization was 2.4. On the other hand, 26 professionals from other types of organizations had a weighted average rating of 2.57 for this topic. Out of 15 development professionals, 20% (3) respondents strongly agreed, 46.67% (7) respondents agreed, 13.33% (2) respondents provided neutral rating, 13.33% (2) respondents disagreed and remaining 6.67% (1) respondent strongly disagreed that female workers could be more effective in development sector in comparison with the corporate sector. In comparison, out of 26 professionals from other type of organizations, 11.53% (3) strongly agreed, 46.15% (12) agreed, 23.08% (6) remained neutral, 11.53% (3) disagreed and 7.7% (2) strongly disagreed that male procurement/supply chain professionals were more efficient in comparison with the female professionals in the context of their organizations. Hence, it is evident that the development professionals are more likely think that female are more effective in development organizations in comparison to the corporate sector.

Figure 16- Comparison on the opinion regarding effectiveness of women in development sector



**Question 7.f: Effectiveness of male procurement professionals in comparison with the female**

	1 = Strongly Agree	2 = Agree	3 = Neutral	4 = Disagree	5 = Strongly Disagree	Total	Weighted Average
Do you think that male procurement professionals are more effective compared to the women, in the context of your organization?	12.20% 5	19.51% 8	19.51% 8	34.15% 14	14.63% 6	41	3.20

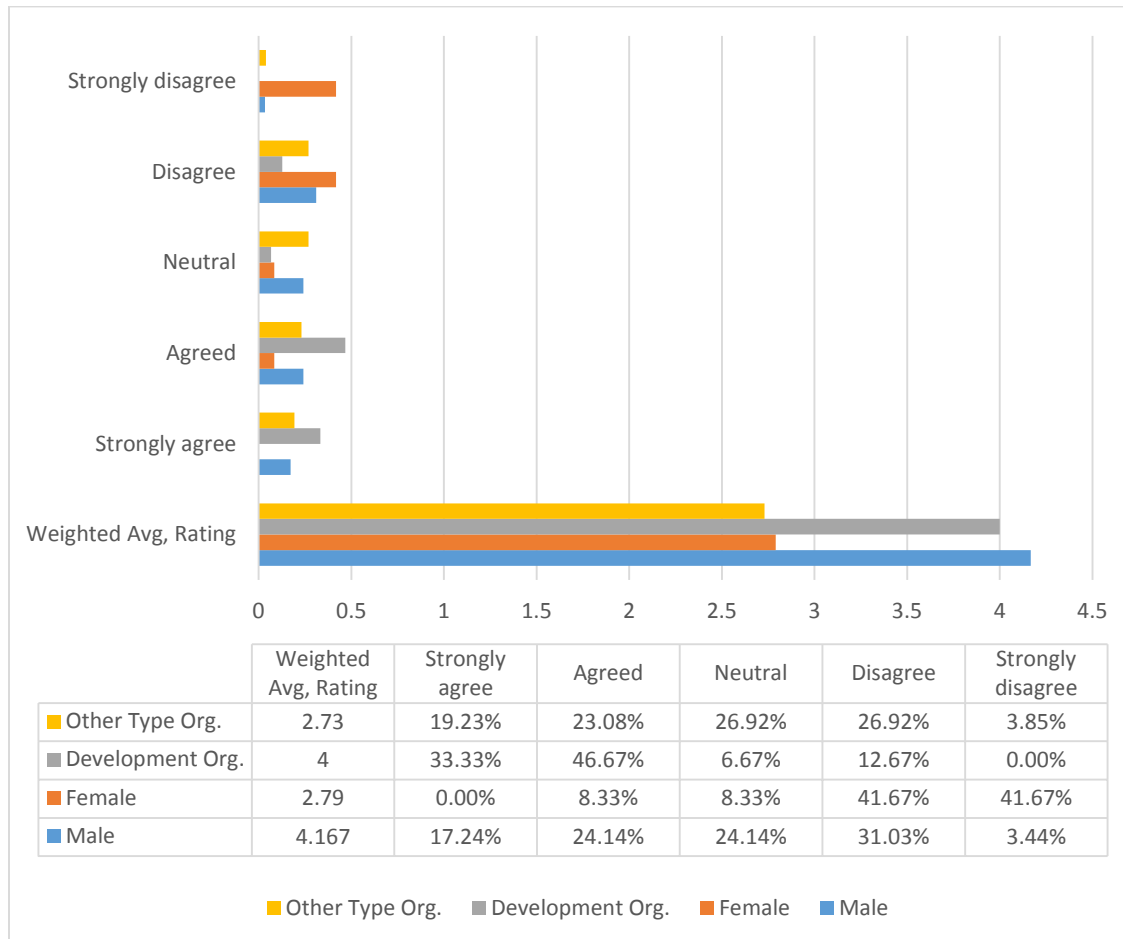
**Overall data analysis:** Weighted average rating for this question was 3.20 which will fall into the neutral category. However, a significant number of the professionals (48.78%) either disagreed or strongly disagreed that male professionals were more effective than female in the context of their organizations. 19.51% respondents (8 respondents) provided neutral rating to this question. A total of 31.71% respondents (13) either strongly agreed or agreed that male professionals were more effective than female professionals in the context of their organizations.

**Gender disaggregated data analysis:** Interestingly, the weighted average rating for the 12 female professionals was 4.167. This rating average was significantly higher than the total weighted average of 3.20. However, 29 male professionals had a weighted average of 2.79 which was higher than the total weighted average of 3.20. It is notable that out of 12 female respondents, 41.67% of the respondents strongly disagreed and another 41.67% disagreed that male procurement/supply chain professionals were more effective in comparison with the female professionals in the context of their organizations. Only 8.33% respondents provided neutral rating and another 8.33% agreed on this topic. It is notable that no female professional strongly agreed. In comparison, out of 29 male respondents, 5 strongly agreed (17.24%), 7 agreed (24.14%), 7 remained neutral (24.14%), 9 disagreed (31.03%) and remaining 1 (3.44%) strongly disagreed. Hence, it is clearly evident that female professionals gave a very strong opinion that male professionals are not more effective than female in the context of their organizations. However, male professionals provided a rather mixed response regarding the efficiency of male procurement/professionals in comparison with the female professionals in the context of their organizations.

**Difference between development and other types of organizations:** The weighted average rating of 15 professionals who work in the development organization was 4. On the other hand, 26 professionals from other types of organizations had a weighted average rating of 2.73 for this topic. Out of 15 development professionals, 33.33% (5) respondents strongly disagreed and an overwhelming 46.67% (7) disagreed that male procurement/supply chain professionals were more effective in comparison with the female professionals. Only 6.67% (1) respondent provided neutral rating and remaining 12.67% (2) respondent agreed on this question. It is notable no development professional provided strongly agreed rating on this topic. In comparison, out of 26 professionals from other type of organizations, 19.23% (5) strongly agreed, 23.08% (6) agreed, 26.92% (7) remained neutral, 26.92% (7) disagreed and 3.85% (1) strongly disagreed that male procurement/supply chain professionals were more effective in comparison with the female professionals in the context of their organizations. Hence, it is clearly evident that the development professionals think that male professionals are not more effective in comparison with the female professionals in the context of their organizations. However, the professionals from other types of organizations gave mixed response on this question.

*[Intentionally left blank]*

Figure 17- Comparison of opinion regarding the effectiveness of male professionals



**Question 7.f and Question 7.d: Effectiveness and efficiency of male procurement professionals in comparison with the female**

The correlation coefficient between the opinions from the following two questions was 0.891.

- Do you think that male procurement professionals are more efficient compared to the women, in the context of your organization?
- Do you think that male procurement professionals are more effective compared to the women, in the context of your organization?

As such, it indicates that there was a positive correlation between the answers for those two questions. Two similar but different concept was used intentionally by the researcher to test whether the respondents provide same opinion regarding both effectiveness and efficiency. The mean rating for the efficiency question was 3.24 and the mean rating for the effectiveness question was 3.19. Hence, in terms of average both questions had similar rating. Most of the individuals tended to give same ratings for these two questions. As a result, there is a strong

positive correlation for the answers of these two questions. After a manual comparison with the two opinions, it was observed that a total of 33 professionals provided the same rating for the both questions and remaining 8 respondents provided responses which do not match for both the questions. The positive correlation is further reinforced by the following regression analysis between the two opinions.

Figure 18- Regression statistics for effectiveness and efficiency

Regression Statistics								
Multiple R	0.891408169							
R Square	0.794608523							
Adjusted R Square	0.789342075							
Standard Error	0.578567698							
Observations	41							
ANOVA								
	df	SS	MS	F	Significance F			
Regression	1	50.506093	50.5060929	150.8813	5.575E-15			
Residual	39	13.054883	0.33474058					
Total	40	63.560976						
	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	0.415215746	0.2473782	1.67846571	0.1012529	-0.085154	0.915585288	-0.085153797	0.915585288
X Variable 1	0.885314156	0.0720742	12.2833748	5.575E-15	0.7395304	1.031097944	0.739530368	1.031097944

**Question 7.g: Participation of female procurement professionals for organizational effectiveness**

	1 = Strongly Agree	2 = Agree	3 = Neutral	4 = Disagree	5 = Strongly Disagree	Total	Weighted Average
Do you think that having female procurement professionals helps an organization to be more effective?	26.83% 11	31.71% 13	26.83% 11	12.20% 5	2.44% 1	41	2.32

**Overall data analysis:** Weighted average rating for this question was 2.32 which will fall into the agree category. Majority of the professionals (58.53%) either agreed or strongly agreed that having female procurement professionals helps an organization to be more effective. 26.83% respondents (11 respondents) provided neutral rating to this question. Only 14.63%

respondents (6) either strongly disagreed or disagreed that having female procurement professionals help and organization to be more effective.

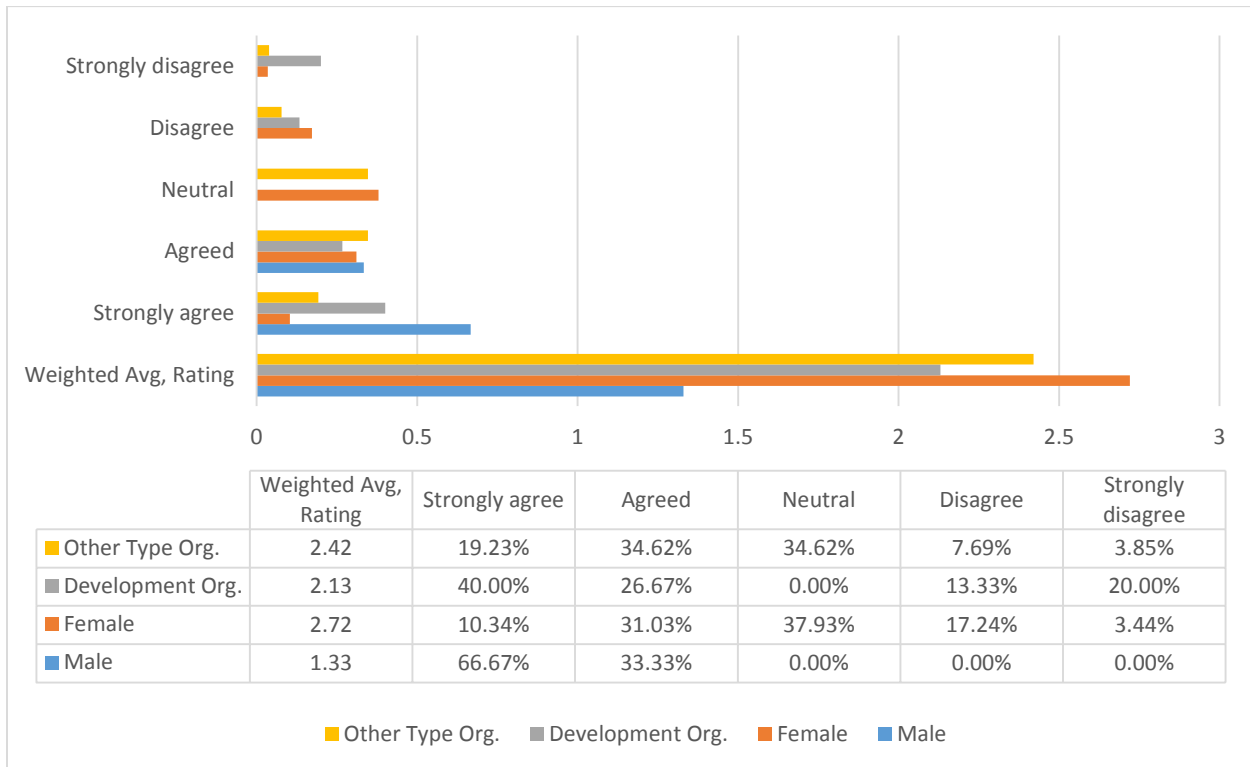
**Gender disaggregated data analysis:** Interestingly, the weighted average rating for the 12 female professionals was 1.33 which was much lower than the weighted average rating of 2.32. However, 29 male professionals had a weighted average of 2.72 which was significantly higher than the total weighted average of 2.32. It is notable that out of 12 female respondents, 66.67% of the respondents strongly agreed and 33.33% agreed that having female professionals helps an organization to be more effective. It is notable that no female professional strongly disagreed, disagreed or provided neutral rating on this question. In comparison, out of 29 male respondents, only 3 strongly agreed (10.34%), 9 agreed (31.03%), 11 remained neutral (37.93%), 5 disagreed (17.24%) and remaining 1 respondent (3.44%) strongly disagreed. Hence, it is clearly evident that female professionals gave a very strong opinion that having female procurement professionals helps an organization to be more effective. However, male professionals provided a rather mixed response regarding this question. It is notable that a significant number of male professionals provided neutral rating for this question but no female respondents provided neutral rating.

**Difference between development and other types of organizations:** The weighted average rating of 15 professionals who work in the development organization was 2.13. On the other hand, 26 professionals from other types of organizations had a weighted average rating of 2.42 for this topic. Out of 15 development professionals, 40% (6) respondents strongly agreed and 26.67 (4) agreed that having female procurement professionals helps an organization to be more effective. Only 13.33% (2) respondents disagreed and remaining 20% (3) respondents strongly disagreed on this question. It is notable that no development professional provided neutral rating on this topic. In comparison, out of 26 professionals from other type of organizations, 19.23% (5) strongly agreed, 34.62% (9) agreed, 34.62% (9) remained neutral, 7.69% (2) disagreed and 3.85% (1) strongly disagreed that having female procurement/supply chain professionals helps an organization to be more effective. Hence, it is clearly evident that the development professionals are more likely to agree on this topic in comparison with the professionals from other types of organizations.

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Figure 19- Comparison of opinion regarding participation of female procurement professionals for organizational effectiveness



**Question 7.h: Opinion regarding the challenge of female procurement/supply chain profession**

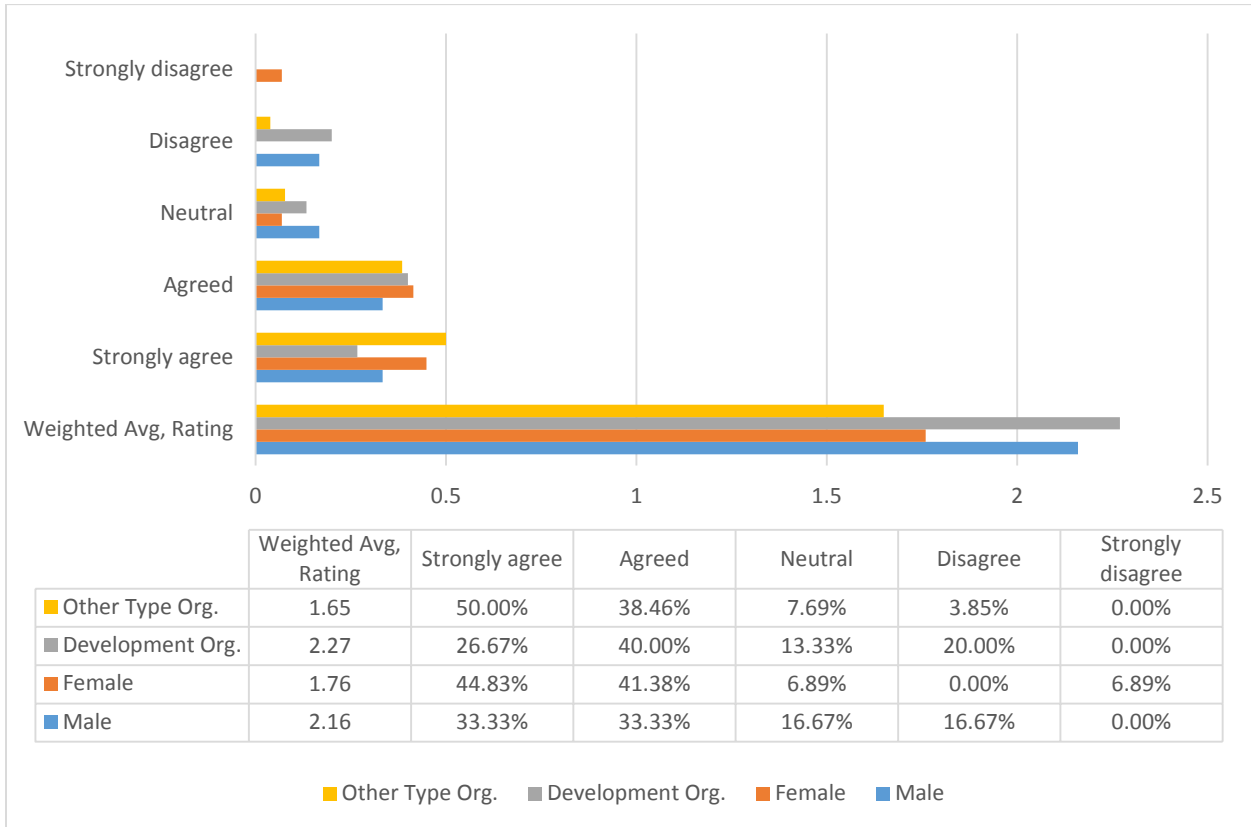
	1 = Strongly Agree	2 = Agree	3 = Neutral	4 = Disagree	5 = Strongly Disagree	Total	Weighted Average
Do you think that it is challenging for women to work in procurement/supply chain profession in the context of Bangladesh?	39.02% 16	41.46% 17	9.76% 4	9.76% 4	0.00% 0	41	1.90

**Overall data analysis:** Weighted average rating for this question was 1.90 which will fall more towards the agree category. Interestingly, an overwhelming majority of the professionals (80.48%) either agreed or strongly agreed that it is challenging for women to work in the procurement/supply chain profession in the context of Bangladesh. Only 9.76% respondents (4 respondents) provided neutral rating to this question. Only 9.76% respondents (4) disagreed that it is challenging for women to work in procurement/supply chain profession in the context of Bangladesh. No respondents provided neutral rating on this question.

**Gender disaggregated data analysis:** Interestingly, the weighted average rating for the 12 female professionals was 2.16 which was higher than the weighted average rating of 1.90. However, 29 male professionals had a weighted average of 1.76 which was lower than the total weighted average of 1.90. It is notable that out of 12 female respondents, 33.33% strongly agreed, 33.33% agreed, 16.67% provided neutral rating and remaining 16.67% disagreed that it is challenging for women to work in the procurement/supply chain profession in the context of Bangladesh. It is notable that no female professional strongly disagreed on this question. In comparison, out of 29 male respondents, 13 strongly agreed (44.83%), 12 agreed (41.38%), 2 remained neutral (6.89%) and 2 (6.89%) respondents strongly disagreed. It is notable that no male respondent provided disagree rating and 86.20% male professionals either strongly agreed and agreed that it is challenging for the women to work in the procurement/supply chain profession in the context of Bangladesh. Hence, it is evident that male are more likely to think that there are challenges for women to work in the procurement/supply chain profession in comparison to the female professionals.

**Difference between development and other types of organizations:** The weighted average rating of 15 professionals who work in the development organization was 2.27. On the other hand, 26 professionals from other types of organizations had a weighted average rating of 1.65 for this topic. Out of 15 development professionals, 26.67% (4) respondents strongly agreed, 40% (6) respondents agreed, 13.33% (2) respondents provided neutral rating and remaining 20% (3) respondents disagreed that there is challenge for women to work in the procurement/supply chain profession. It is notable that no development professional provided strongly disagree rating on this topic. In comparison, out of 26 professionals from other type of organizations, an overwhelming 50% (13) strongly agreed, 38.46% (10) agreed, 7.69% (2) provided neutral rating and remaining 3.85% (1) respondents disagreed on this question. No respondents from other organizations provided the strongly disagree rating. It is observed that 88.46% professionals from other type of organizations either agreed or strongly agreed that there is challenge for the women to work in the procurement/supply chain profession. Hence, it is clearly evident that the development professionals are more likely to disagree on this topic in comparison with the professionals from other types of organizations.

Figure 20- Comparison on the opinion regarding the challenge of women in procurement/supply chain profession



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**Overall Descriptive Statistics Analysis for the opinions provided by respondents are provided below:**

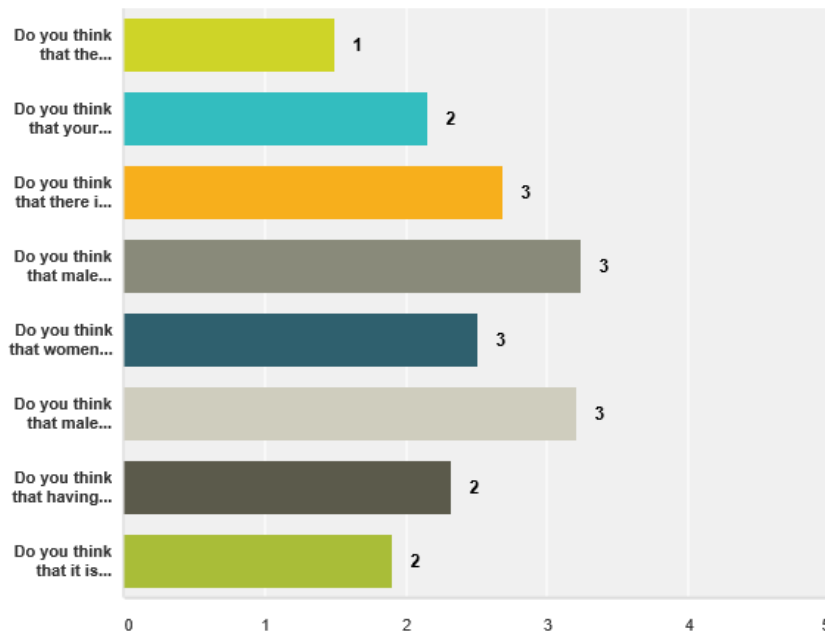
<i>Do you think that the participation of women in procurement/supply chain profession is low in Bangladesh?</i>	<i>Do you think that your organization has conducive work environment for the female procurement/supply chain professionals?</i>	<i>Do you think that there is gender stereotype for the female procurement/supply chain professionals?</i>	<i>Do you think that male procurement professionals are more efficient compared to the female, in the context of your organization?</i>	<i>Do you think that women could be more effective in the development organizations (third sector) in comparison with the corporate sector (for-profit)?</i>	<i>Do you think that male procurement professionals are more effective compared to the female, in the context of your organization?</i>	<i>Do you think that having female procurement professionals helps an organization to be more effective?</i>	<i>Do you think that it is challenging for women to work in the procurement/supply chain profession in the context of Bangladesh?</i>								
Mean	1.487805	Mean	2.121951	Mean	2.682927	Mean	3.243902	Mean	2.512195	Mean	3.195122	Mean	2.317073	Mean	1.878049
Standard Error	0.093195	Standard Error	0.175288	Standard Error	0.153968	Standard Error	0.196867	Standard Error	0.175033	Standard Error	0.198222	Standard Error	0.169069	Standard Error	0.14896
Median	1	Median	2	Median	3	Median	4	Median	2	Median	3	Median	2	Median	2
Mode	1	Mode	1	Mode	3	Mode	4	Mode	2	Mode	4	Mode	2	Mode	1
Standard Deviation	0.596739	Standard Deviation	1.122389	Standard Deviation	0.985876	Standard Deviation	1.260565	Standard Deviation	1.120758	Standard Deviation	1.269242	Standard Deviation	1.082567	Standard Deviation	0.953811
Sample Variance	0.356098	Sample Variance	1.259756	Sample Variance	0.971951	Sample Variance	1.589024	Sample Variance	1.256098	Sample Variance	1.610976	Sample Variance	1.171951	Sample Variance	0.909756
Kurtosis	-0.29249	Kurtosis	-0.33319	Kurtosis	0.21668	Kurtosis	-0.94528	Kurtosis	-0.062	Kurtosis	-0.9782	Kurtosis	-0.54132	Kurtosis	0.184629
Skewness	0.791093	Skewness	0.752626	Skewness	0.199909	Skewness	-0.48682	Skewness	0.752118	Skewness	-0.30881	Skewness	0.437132	Skewness	0.980966
Range	2	Range	4	Range	4	Range	4	Range	4	Range	4	Range	4	Range	3
Minimum	1	Minimum	1	Minimum	1	Minimum	1	Minimum	1	Minimum	1	Minimum	1	Minimum	1
Maximum	3	Maximum	5	Maximum	5	Maximum	5	Maximum	5	Maximum	5	Maximum	5	Maximum	4
Sum	61	Sum	87	Sum	110	Sum	133	Sum	103	Sum	131	Sum	95	Sum	77
Count	41	Count	41	Count	41	Count	41	Count	41	Count	41	Count	41	Count	41
Confidence Level(95.0)	0.188354	Confidence Level(95.0)	0.35427	Confidence Level(95.0)	0.311181	Confidence Level(95.0)	0.397883	Confidence Level(95.0)	0.353755	Confidence Level(95.0)	0.400622	Confidence Level(95.0)	0.3417	Confidence Level(95.0)	0.30106

***[Intentionally left blank]***

	Minimum	Maximum	Median	Mean	Standard Deviation
Do you think that the participation of women in procurement/supply chain profession is low in Bangladesh?	1.00	3.00	1.00	1.49	0.59
Do you think that your organization has conducive work environment for the female procurement/supply chain professionals?	1.00	5.00	2.00	2.15	1.12
Do you think that there is gender stereotype for the women procurement/supply chain professionals?	1.00	5.00	3.00	2.68	0.97
Do you think that male procurement professionals are more efficient compared to the women, in the context of your organization?	1.00	5.00	4.00	3.24	1.25
Do you think that women could be more effective in the development organizations (the third sector) in comparison with the corporate sector (for-profit organizations)?	1.00	5.00	2.00	2.51	1.11
Do you think that male procurement professionals are more effective compared to the women, in the context of your organization?	1.00	5.00	3.00	3.20	1.25
Do you think that having female procurement professionals helps an organization to be more effective?	1.00	5.00	2.00	2.32	1.07
Do you think that it is challenging for women to work in procurement/supply chain profession in the context of Bangladesh?	1.00	4.00	2.00	1.90	0.93

### Your opinions

Answered: 41 Skipped: 0



**The perceived reasons for women to think that procurement/supply chain profession is challenging (question 8):**

The professionals were able to pick the most appropriate responses and each respondents were allowed to pick multiple responses. The respondents were also given the option to give their own responses in texts. The followings were the findings:

*Figure 21- Opinion regarding perceived challenges for female to participate in the procurement/supply chain profession*

Answer Choices	Responses
It is a hard working profession (1)	39.02% 16
Employers prefer male over female for this profession (2)	63.41% 26
I do not think there is any challenge (3)	9.76% 4
It requires long work hours (4)	46.34% 19
This profession does not fit woman's persona (5)	7.32% 3
Other (please specify) (6)	Responses 17.07% 7
Total Respondents: 41	

It is evident that majority of the professionals think that employees prefer male over female for the procurement/supply chain profession. The second most popular response was that this

profession requires long working hours. The third most preferred answer was that it was a hard working profession. Only four respondents thought that there is no challenge for the female procurement/supply chain profession. Only three professionals thought that this profession does not fit woman's persona. A total of seven respondents provided other texts which are as follows:

1. It is challenging because we need to work/communicate with local vendors
2. Pre-set wrong conception & lack of confidence
3. As women are still expected to lead child rearing and household coordination, the long hours can be problematic
4. There is a misconception that man can handle hard and stressful work assignments easier than women and that they can cope with difficulties more successfully without emotions, which I think is false. Regardless of sex one can be effective working in any field of interest (including procurement/supply chain) if adequate education, motivation/drive and experience are there and if the person is willing to make a change in that field.
5. Unfamiliarity
6. It is simply challenging and have up and down of satisfaction
7. Social acceptance is another fact to consider here

Except number 6 comment all other comment seems valid in the context of the question. The first response mentioned about the difficulties for women to work with the local vendors. The case study number 1 will reinforce the idea of difficulties of female procurement professionals to work with the local vendors. Number two response actually had two parts. First one is about wrong conception. It is not quite clear whether the wrong conception is about the women professionals or the recruiters. It could be either and the analyst tried to validate this concept through the expert interviews. Secondly, there is a mention of lack of confidence. Lack of confidence could be for the women professionals as well for the employers. The third response is about the household roles women have in addition to their regular work. This fact seems to be applicable across the board to all the professionals not only to the procurement/supply chain professionals. In fact, there is a relevant answer to the question on long working hour. This answer somewhat resonance the set answer that this profession requires long working hours. The fourth response is somewhat similar to the second response which talks about the misconception about women's ability to perform hard and challenging tasks. This answer also talks about the emotional aspects of female as opposed to the male. Again, the misconception about male's superior emotional prowess was highlighted in the answer. The fifth answer is regarding the unfamiliarity. This could also be a valid ground for the women to not participate in the procurement/supply chain profession. The fact that most of the procurement/supply chain professionals do not come with previous experience or education, it could be a factor. The seventh response is about the social norm. This issue has been highlighted by the all the three experts that the researcher interviewed. Hence, it appears to be a very important challenge for the women.

## CASE STUDY 1

**Title:** Difficulties for female procurement professionals to work with local vendors  
(Gender/Cultural Stereotype for female procurement professionals)

**Name:** Sultana Pervin

**Name of current organization:** Does not work now

**Previous Experience:** USAID/Bangladesh, Canadian Embassy, local organization

Ms. Pervin talked with the researcher on June 2, 2016 over skype. She is currently located in Houston, Texas. She quit her job with USAID/Bangladesh to be re-united with her family in USA. Her only son aged around 12 and faced physical and mental disabilities due to the autism. Ms. Pervin started the career as an administrative assistant and went up through the ladder of the career as Procurement Specialist despite being held back by her extra responsibilities of rearing a disabled child. She completed her masters in philosophy from Jahangirnagar University. She discussed some of the difficulties she faced being a female procurement specialist. She specifically mentioned about one particular incident which involved dealing with a local vendor. She was requested to purchase a Chinese Canopy generator of 10 KW capacity for the office use while working for a local organization within the budget of TK 300,000. Her office previously purchased generator of similar nature but it was her first assignment to purchase a generator. A generator purchase involves many intricacies on technical knowledge and vendor familiarity. Ms. Pervin started with reputed generator suppliers such as RahimAfrooz, Wilson, Pramac, energypac, etc. but quotations for the canopy generator were high compared to budget and most of them quoted generators with engines manufactured in countries like UK, Spain, Turkey, etc. From the yellow pages she received an idea that there are many vendors in the Nawabpur Road at Old Dhaka. She tried to contact some of the vendors but they either did not want to provide quotation for an official purchase. Many vendors did not want to talk in over phone regarding the price. Rather, they wanted to talk in person regarding price and specifications. Hence, Ms. Pervin decided to visit Nawabpur Road during the office hours.

She could not manage to book the official vehicle so she had to reach there by CNG run auto-rickshaw which took around two and half hours commuting from her Uttara Office. She found herself in a precarious situation when she found that there is no female sales representatives and buyers in the market. The buyers were buying generators and other equipment with cash and without official quotation. She tried to talk with one of the reputed local vendor called Rashid Machineries. The sales representative gave an idea about the price which was much lower than the other quotes. The sales representative mentioned that they import the generators themselves and they will help to get a group of mechanics to install **(continued in the next page)**



## CASE STUDY 1 (CONTINUED)

the generator. They will also help to get a transportation for the generator and provide after sales servicing if there is any problem with the installation. However, they were not willing to provide a formal quotation and they were also not willing to take the money through formal official cheque or work order. According to the sales person, quotation preparation takes time and educated people but they did not have such luxury. In addition, they had bad experience with cheque payment as many organizations delayed or did not pay them when they gave them the option of cheque payment. Ms. Pervin was only able to convince the sales representative to provide a quotation and accept cheque payment when Ms. Pervin's male co-worker talked with the sales representative and Ms. Pervin personally pledged around TK 100,000 from her own account in cash in case of default payment. The sales representative was much more comfortable dealing with the male co-worker because the sales representative got much more assurance from her male colleague as a purchasing agent with credibility.

During the installation of the generator, the mechanics leaked the base of the generator where fuel tank was located. As a result, after a week of generator installation fuel used to come out of the basement of the generator when started. When this issue was notified by Ms. Pervin to the sales person, the sales person mentioned it was Ms. Pervin's responsibility to ensure proper installation and there was no after sales warranty. Hence, they will not be able to provide any replacement or after sales service. When Ms. Pervin went to Nawabpur Road in person, the sales representative sent a mechanic with Ms. Pervin to check the problem but the mechanic did not find any problem. Ms. Pervin contacted another mechanic to look into the problem. The mechanic pointed out the cracks in the generator basement which might have been caused by the transportation irregularities or installation irregularities. When this issue was informed to the sales representative, he did not believe the fact and would not propose any solution. Only after Ms. Pervin engaged her male co-worker, the sales representative agreed to replace the generator at an additional cost of TK 20,000 as transportation and damage fixing cost.

The case illustrates following difficulties for women to deal with local vendors:

- Vendors often think that female purchasing officials do not have the authority to bind their organization for purchasing decision.
- It is very difficult to commute to locations like Old Dhaka where there are problems with public transportation and traffic congestion.

**(continued on the next page)**

## CASE STUDY 1 (CONTINUED)

- Traditionally, only male buyers deal with the local vendors. So, the local vendors rarely have the chance to work with the female purchasing officials and they are not culturally accustomed working with female in the business.
- Female procurement officials will often not be able to constantly communicate and keep in touch with the local vendors in order to make sure proper deliver and installation of the products because female professionals have additional family responsibilities after the work hours. Meanwhile, male will have more flexibility of communicating with the local vendors after the working hours.
- Female procurement officials often will not have the authority from the local organizations to bind them in any purchase.

**Barrier to entry for the female professionals:** In order to validate the majority response that employers prefer male over female for this profession, the researcher checked some of the procurement and supply chain job announcements on websites such as [www.bdjobs.com](http://www.bdjobs.com), [www.jobsA1.com](http://www.jobsA1.com), [www.chakri.com](http://www.chakri.com), [www.bikroy.com](http://www.bikroy.com), etc. Followings are the findings from the review on June 26, 2016

Serial	Organization Name	Position	Inclusion of “only males are allowed to apply”
1	Knit Asia Limited	Executive Procurement-Import	No
2	Edision Group	Executive Commercial	No
3	The Ibn Sina Pharmaceuticals Ind. Ltd.	Executive, Purchasing	Yes
4	Keya Group	Purchase Officer	Yes
5	Crystal Martin Apparel Bangladesh	Senior Manager-Procurement	No
6	Super Star Group (SSG)	Sr. Executive-SCM	NO
7	Advanced Chemical Industries Limited (ACI)	Executive-Supply Chain-ACI Motors-Yamaha Motor Cycles	No
8	Dekko Group	Jr. Executive/Commercial-Import	No
9.	Lindex Bangladesh Liaison Office	South Asia Sustainability Manager	No
10	Gazi Group	Assistant Manager-Store	Yes

11	Sajib Corporation	SCM (Procurement)	Yes
12	Virgo Tobacco Limited	Store Officer	Yes

It is notable that quite a few reputed corporate such as Gazi Group and Sajib Corporation limited their procurement supply chain jobs for the male applicants only. The sample size to draw any strong conclusion and the companies might post one off position for males only. The job announcements that included “only males are allowed to apply” are attached in the attachment c. The researcher also observed that most of the announcements included the requirements such as dedicated, hardworking, long working hours, etc. The female professionals who have significant responsibilities at home might avoid such job as it will require long working hours. The case study number 2 support this logic.

## CASE STUDY 2

**Title:** Barrier to entry!

**Name:** Sayeda Nigar

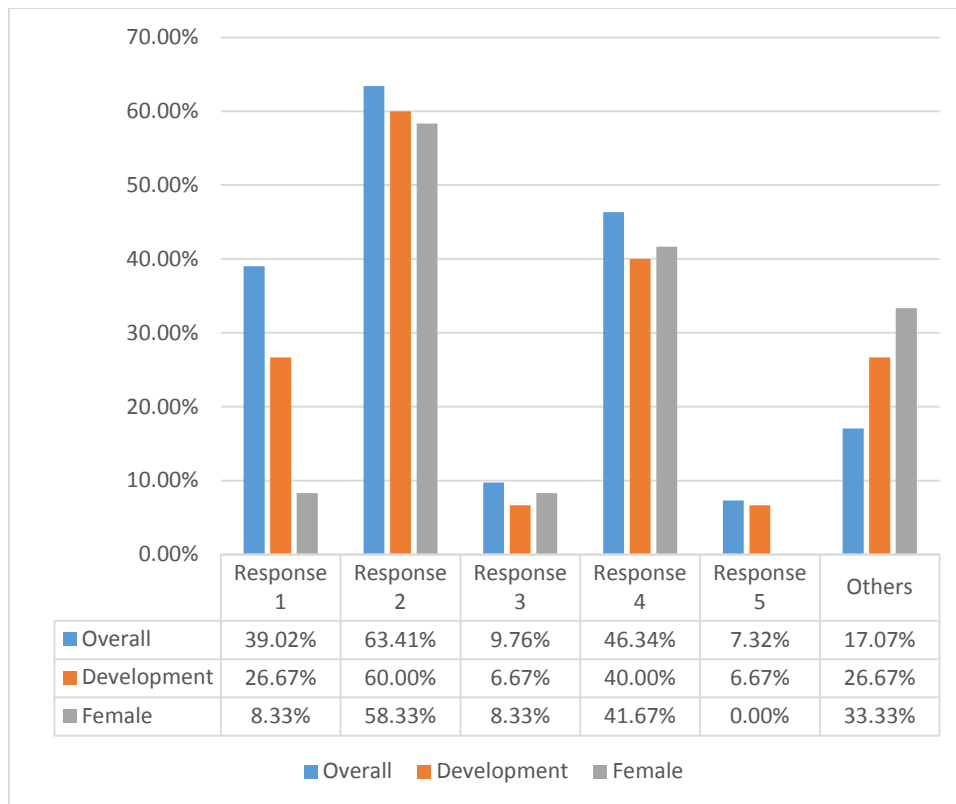
**Name of current organization:** Does not work now

**Previous Experience:** Does not have any formal procurement experience

Sayeda Nigar completed her bachelor degree in English from BRAC university with distinction. She is currently pursuing MPSM degree from the same university. Ms. Nigar’s only son is around four years old and she does not have support from her family to rear her son. So, she is the only person responsible to look after her child as her husband works. Ms. Nigar did not try to get any job after completing her bachelor degree as her son was still young and needed support. When she tried to get job, Ms. Nigar faced difficulties getting a procurement job for multinational and national organizations because she did not have formal experience in procurement/supply chain and many of the job announcements were only open for the male only. Even if she was selected for the interview, the during the employers asked whether she could work extra hours and communicate with the vendors after working hours. The employers did not probably buy into her positive responses and did not offer her the jobs. She observed that her other male students are easily getting the job without facing the question of working extra hours or communicating with the vendor after the working hours. Ms. Nigar participated in this research survey and shared many job announcements that contained language to restrict the positions to the males only.

**Comparison of response from development and female professionals:** The responses on this question was compared with overall response of the 41 professionals, 15 development professionals and 12 female professionals as follows:

*Figure 22- The perceived reasons for women to think that procurement/supply chain profession is challenging*



Based on the comparison of the opinions from development and female professionals, it appears that there are similarities of opinion for response 2, 3, 4 and 5 among the development, female and overall respondents. However, only 8.33% opined that perceived reason for women to think that procurement/supply chain profession is a challenging profession because it is a hard working profession (response 1). It is observed that overall opinion on this response was 39.02% which was much higher than opinion from development (26.67%) and female (8.33%) professionals. This indicates that professionals from other sectors and male professionals have stronger believe that women perceive that procurement profession is challenging because of the hard working nature of the profession. However, women themselves were less likely to believe that this was a major cause. It is notable that around 33% female respondents provided additional responses on this question which are as follows:

- It is challenging because we need to work/communicate with local vendors
- Pre-set wrong conception & lack of confidence

- As women are still expected to lead child rearing and household coordination, the long hours can be problematic
- There is a misconception that man can handle hard and stressful work assignments easier than women and that they can cope with difficulties more successfully without emotions, which I think is false. Regardless of sex one can be effective working in any field of interest (including procurement/supply chain) if adequate education, motivation/drive and experience are there and if the person is willing to make a change in that field.

These responses provided some important insights and perspectives to the research. In comparison, only 26.67% development professionals provided additional text responses and overall 17.07% respondents provided texts responses.

It is notable that in all three cases, majority of the respondents opined that the perceived reason for the women to think that procurement/supply chain profession is a challenging profession because of the fact that employees prefer male over female for this profession. In fact, 63.41% overall, 60.00% development and 58.33% female respondents believed that this is the reason for the perceived challenge for the women to participate in the procurement/supply chain profession.

**Organization’s role to allow effective participation of women in procurement/supply chain profession (question 9):**

The respondents allowed to pick only one answer for this question. However, the respondents were allowed to provide their own texts by choosing the other reason. The followings were the findings:

**What can an organization do to allow effective participation of women in procurement/supply chain profession?  
(pick the most appropriate option)**

Answered: 41 Skipped: 0

Answer Choices	Responses
Allow more flexibility to women professionals (1)	31.71% 13
Stop undue influence from male coworkers (2)	9.76% 4
Provide more training for the women professionals (3)	39.02% 16
Rely on nature (4)	9.76% 4
Other (please specify) (5) <span style="float: right; color: blue;">Responses</span>	9.76% 4
<b>Total</b>	<b>41</b>

It is notable that a majority of the respondents (16) think that organizations should provide more training for the women professionals to allow effective participation of women in procurement/supply chain profession. Secondly, 13 respondents thought that allowing more flexibility to women professionals will allow effective participation of women in the procurement/supply chain profession. Only four respondents thought that stopping undue influence from male coworkers would allow effective participation of women in procurement/supply chain profession. Another four respondents opined that relying on nature would be the best way for allowing effective participation of women in the procurement/supply chain profession. The remaining four respondents provided additional texts as mentioned below:

- Provide more gender awareness/sensitivity training to male workers and allow flexible work schedules for all- not just women
- Women should be considered equal members of the society and within the labor market so as within the organization with men regardless of their age, position and family status. Women proved themselves to be just as effective/efficient with men in procurement (and elsewhere, too) and more could be given the chance if adequate circumstances were to be created within an organization (due to women's different role within the family). Women empowerment is essential in procurement as well; they should have equal chance to participate in training programs, and they should have representation in the upper/middle management.
- Employers has to prefer woman for this position
- If they can take the challenge, then they should come to this profession

The first comment specifically mentioned about the sensitivity training for the male workers which could be linked to the response related to the “stop undue influence from the male coworker’ response. The first comment also pointed out about the requirement of providing more flexibility for the female professionals. Hence, two different ideas were presented in the first comment. In the second comment, the respondents stressed on the women empowerment and equality to allow effective participation of women in this profession. The third comment mentioned that employers have to prefer women for this position. This can be linked to the finding from the previous question which indicated that most of the professionals think that the male gender preference for this profession is the main challenge for women to participate in this profession. The responded provided a very valid response by indicating that if employers prefer women for the procurement/supply chain profession, there will be effective participation of women in this profession. The fourth and last comment mentioned that if women are capable to take the challenge they should join this profession. This comment does not provide any specific way to allow effective participation of women in this profession. Hence, this comment can be disregarded.

## 7.2. EXPERT INTERVIEW

### 7.2.1. Questions of the expert interviews:

The questions of the expert interviews were set and drafted in a way that the answers of the expert interviews will help the researcher to validate and elaborate on the findings from the survey responses. Followings were the expert interview questions and their applicability for this particular dissertation:

**1. Do you think that there is any difference of women's professional effectiveness in development organizations in comparison to the for-profit organizations?**

**Applicability:** This question is related to the question no. 7.e which requests respondents to provide opinion whether women could be more effective in the development organizations (third sector) in comparison with the corporate sector (for-profit). This answer of this question will validate the responses from the survey.

**2. What is your observation about women's position in the third sector (development) as a whole in Bangladesh?**

**Applicability:** This is an independent question which is not directly related to any of the survey questions. However, the answer of this question can be linked with the first interview question. It will also help to understand about women's position as a whole in the development organizations.

**3. Do you think that having women procurement professionals helps an organization to be more effective?**

**Applicability:** This question is related to the question no. 7.f which requests respondents to provide opinion whether having women procurement professionals helps an organization to be more effective. This answer of this question will validate the responses from the survey.

**4. Do you think that there is gender stereotype for the women procurement/supply chain professionals?**

**Applicability:** This question is related to the question no. 7.c which requests respondents to provide opinion whether there is gender stereotype for the female procurement/supply chain professionals. This answer of this question will validate the responses from the survey.

**5. Do you think that male procurement professionals are more effective compared to the women in general?**

**Applicability:** This question is related to the question no. 7.e which requests respondents to provide opinion whether women could be more effective in the development organizations (third sector) in comparison with the corporate sector (for-profit). The related survey question and the first expert interview question compared development organization and corporate sector. However, this question is more general in nature because it emphasizes the effectiveness of male procurement professionals with female procurement professionals in general. This answer of this question will validate the responses from the survey.

**6. What do you think could be the reason(s) for women to perceive that procurement/supply chain profession is challenging in the context of Bangladesh?**

**Applicability:** This question is related to the question no. 8 which requests respondents to provide opinion on the possible reason(s) for women to perceive that procurement/supply chain profession is challenging. The survey included several readily available options and option for text based comments. The answers from the gender and HR specialist will further enhance and validate the responses from the survey.

**7. Based on your experience, what do you think about women's participation in procurement profession in Bangladesh?**

**Applicability:** This is very generic type of question to end the interview session. This question will help the researcher to gather opinion from the gender experts regarding the overall impression and comments from the gender and HR specialists regarding the research topic. The answers from this question will help to make recommendation, draw conclusion and validate other responses from the survey responses.

**7.2.2. Profile of the experts:**

**Dr. Rokeya Khatun:** Dr. Khatun is currently working for the USAID's Women Empowerment Activity as Gender Specialist. Dr. Khatun is a Gender Specialist with over 30 years of experience in gender mainstreaming, capacity building, and management. Dr. Khatun's assignments have spanned diverse international development projects throughout Bangladesh and Afghanistan. She has worked on projects for donors such as UN Women, ADB, UNDP, UN World Food Program, CIDA, and others. As an expert in the gender field, she has helped identify, design, implement, and monitor bi-lateral projects for various Bangladeshi ministries. She has provided gender based technical inputs for agriculture and food security, as well as in the water sector programs. Dr. Khatun has overseen projects working towards women's economic empowerment and community behavioral changes. She has built the capacity of government officials and developed gender equality planning tools for various sectors. She has also served in an advisory role for gender mainstreaming in many different sectors. Dr. Khatun attained Ph.D. in Demography from the Jahangirnagar University and MA in Development Economics from William's College, Massachusetts, U.S.A. She was selected for the expert



interview because of her extensive experience in the development organizations in the UN systems and other development organizations. An interview was conducted with Dr. Khatun on April 1, 2016 for about 20 minutes based on the set questions.

**Ms. Mahmuda Rahman Khan:** Ms. Khan is currently working for USAID/Bangladesh as Senior Program Development Specialist. She also has the role in the donor coordination and Government of Bangladesh liaison. She has been working for USAID/Bangladesh for over nine years. She worked for USAID/Afghanistan for a year. She has a masters in economics from University of Dhaka. She worked for DFID and other donor agencies. She has extensive experience of working in gender related issues in the development projects both from the design perspective as well from the root level implementation. She was selected for the interview because of her knowledge in gender related issues in the development organizations. A formal interview was conducted with Ms. Khan on March 24, 2016. The interview was recorded with electronic recording device.

**Ms. Nafeesa Monali Hussain :** Ms. Hussain has been working for Chevron Bangladesh as Supervisor, HR Operations for over three years. She worked as HR Specialist and HR Assistant in USAID Bangladesh for five years. She worked for the Swiss Catalyst as market development officer. She has an MBA from North South University and a bachelors degree from the Texas A&M University, USA in Computer Science. Ms. Monali has extensive experience about HR process and procedures of both development and corporate organizations as she worked for both type of organizations for a number of years. She was selected for the interview because of her experience in both corporate and development organizations. A formal interview was conducted with Ms. Hussain on March 30, 2016. The interview was recorded with an electronic recording device.

### **7.2.3. Analysis and key findings from the expert interviews:**

#### **1. Question 1: Do you think that there is any difference of women's professional effectiveness in development organizations in comparison to the for-profit organizations?**

**Dr. Khatun:** Women's professional effectiveness in development organizations is even more challenging than the for-profit organizations. In for-profit organizations women can claim safety, security, fulfillment of special needs, leave benefits, etc. from the employer even though in most of the cases they are denied or deprived. In for-profit organizations where there is payment provisions on a piece-meal basis, women very often suffer wage discrimination. Women in development organizations are to work for specific time-bound program, it is difficult for them to get fulfilled their special needs. Gender equity is a big question in both for-profit and in development organizations.

**Ms. Khan:** When women grow up, they grow-up in a different socialization process which involves many disparities. There is difference between skill set development of men and women which is partially due to the fact that women often do not have access to information and education. Hence, the learning process is not the same for women in comparison with men. When the women come to the workplace, they consider many factors before joining the work.

I believe women face more challenge in the for profit organizations in comparison with the non-profit organizations. In development sector, people are more aware of the deprivation women face in workplace. So, there is more likelihood that women will face lesser obstacles in comparison with the for-profit organizations. For example, women choose to work in banking sector but it might not be very women friendly. For-profit organizations such as bank has longer working hours comparing to most of the non-profit organizations. For-profit organizations in general have different perspective on the competitiveness and showcasing is also different in for-profit organizations. In addition, in many cases, it has been observed that the for-profit organizations do not provide support services to the women. So, there is a difference. But, there is always exceptions. There are organizations in corporate sector that provide support services and encourages women's participation and there could be grass root NGOs that does not provide that much support for the women.

**Ms. Hussain :** Actually, there is no difference in my opinion. Women's effectiveness is towards her work not towards the organization. So, it doesn't matter whether a women work for a development organization or profit making organization. So, effectiveness is not towards the organizations. I worked in both development and corporate sectors. I work for Chevron with the same mentality I had while I was working for USAID. The nature of work has been changed but honesty and giving 110% effort to my work have not changed after I joined Chevron.

**Analysis of the expert interview:** Three different experts gave three different responses on this question. Dr. Khatun mentioned that she thought that women's professional effectiveness in development organization was more challenging in comparison with the for-profit organization. She mentioned that employees can claim benefits, leaves, security, special needs from the employer. Ms. Khan however thought that women can be more effective in development organizations in comparison with the for-profit organizations. She rationalized that development organizations more likely to accommodate women's need as most of the development organizations work for the social issues. However, she pointed out that there could be exceptions. Ms. Hussain think that there is no difference on the effectiveness of women on the type of organization. Ms. Hussain stressed that a woman effectiveness is not centered around the organization. Rather, a person would give the same level of effort regardless of the type of the organizations.

### Key findings:

- The concept of support services was coined by Ms. Khan. Support services such as pick-up and drop, breastfeeding facilities, child care facilities, etc. will help organizations to retain and attract female professionals. Some for-profit organizations such as grameenphone has child care facility which allows the parents to leave their toddlers at the child care facility. This allows female professionals to concentrate on work rather than thinking about the well-being of the children while at work. Similarly, Care Bangladesh has pick-up and drop services for the employees. This helps employees to not bother about commuting in Dhaka city where traffic and public transportation are major hassle for female professionals.
- There could be exceptions. It might be very difficult for the female procurement professionals to work in a grass root level organization as opposed to more polished international development organizations such UNDP, USAID or DFID.
- Some corporate sector organizations and specific industry might have longer working hours which will not attract the female professionals. In comparison, the development organizations are often not profit driven and they often tend to be more relaxed in terms of timing and office hours.

**Comparison with the survey findings:** Most of the respondents agreed that female procurement/supply chain professional could be more effective in the development organizations in comparison with the for-profit organizations. The development professionals and female respondents agreed more on this topic in comparison with the male respondents and respondents from other type of organizations. While there were mixed inputs on this question from the experts, Ms. Khan pointed out an important element of job for female, support services. The support services should help attract female employees to the procurement professionals regardless of the type of the organization considering the fact that other variables such as remuneration, reputation, flexibility, etc. remain constant.

### 2. Question 2: What is your observation about women's position in the third sector (development) as a whole in Bangladesh?

**Dr. Khatun:** Women are mostly working in blue-collar positions. Some NGOs and civil society organizations are practicing career promotions and capacity development.

**Ms. Khan:** It depends in which area they are working on. In many of the developments interventions, the beneficiaries are the women. For example, most of the beneficiaries in the microcredit programs or the handicraft, livelihood and skill development related projects, women are the major beneficiaries. There is also a question on how one defines participation. If you consider the top of the chain, you will see that women are coming to the development profession but there are more scopes for them to participate in the development works. Another aspect is that, the number might be high but in terms

of quality of participation, there is still a gap between man and women. There is still a huge gap in the decision making and leadership positions.

**Ms. Hussain :** I would say that there are more participation of women in the development sector in comparison to the corporate sector in the context of Bangladesh as per my observation. For example, if I consider USAID, there are more female employee in comparison with the Chevron. There is less than 9% women employees in Chevron. I am not sure about the current USAID ratio but I am sure it is much higher even now. If you consider BRAC or CARE for example, there are lots of female employees. Some of the departments will not even have any male employees (for example departments like HR). Even procurement will have many female employees as finance will have many female workers. Perhaps, you will not find many female workers for the jobs that require frequent field visits. Even in field the field related jobs, the participation of women increased recently. So, in development sector women are more interested to work in comparison to the corporate sector. In USAID, women hold more top positions in comparison with the Chevron. If you compare the salary grades between Chevron and USAID, this will become more apparent.

**Analysis of the expert interviews:** Dr. Khatun opined that most of the women in the development profession hold blue-collar jobs. However, she pointed out that some NGOs and development organizations have career progress for female. Ms. Khan provided a more elaborate response. She mentioned that while there will be high number of female workers in the development organizations, there might still be difference in pay gap. In addition, women might not hold many leadership and decision making roles. Ms. Hussain provided a comparison between corporate and development sector. She pointed out that number wise development organization tend to employ more female. She also mentioned that female employees tend to hold more of the leadership and higher pay job in comparison with the corporate sector.

#### **Key findings:**

- Development organizations tend to employ more female employees than the corporate sector organizations.
- Women tend to hold higher positions in the development organizations in comparison with the corporate sector
- Most of the women hold blue-collar jobs in development sectors

**Comparison with the survey finding:** As per the survey findings, the development or non-profit organizations tend to employ more female employees in comparison with the for-profit organization or other types of organizations. The expert interview validated the fact that development organization tend to employ more female workers in general in comparison with the for-profit organizations.

**3. Question 3: Do you think that having women procurement professionals helps an organization to be more effective?**

**Dr. Khatun:** Yes. If women are there in procurement, it is obvious that the program-based goods will be determined in a gender-sensitive manner and special needs of women will be addressed. And, this will in turn improve effectiveness of the programs for which the organization is working. For example, in a health sector program women participation in procurement will ensure procurement of women-patients' need based furniture and equipment like labor table, toiletries, gynecological bed, etc. In case of an agriculture sector program, the attention to women-friendly machinery procurement will increase, procurement of chemicals and fertilizers that are hazardous to women's health will decrease if women are there in procurement.

**Ms. Khan:** In general, there is lot of possibilities for women to participate in the procurement profession. There might be lots of scopes for corruption in the procurement profession. In my perspective, women tend to be sincerer and hard working in comparison with men. So, if they come in this profession they will be able to contribute positively because apparently they are not that greedy. But, there might be exceptions. But, when they get a position, they want to work hard to prove their effectiveness and efficiency to go up. In addition, they will be more unbiased and less corrupted.

**Ms. Hussain :** If you ask me for my personal opinion, I would say, yes. Women are usually more honest and they are also very loyal to their families and work. Dishonesty and corruption are less common among the women workers in general. It could be a personality issue or hormone related issue but whatever the reason is women tend to be more honest. It could be even fear also. Generally, women tend to think that they will work 8-5 and they will not take any risk with their job. Procurement involves transaction of money and honesty is very important when it comes to transaction of monies. Hence, I think women could be more effective in procurement profession. But, I don't want to compare with men. Men are also very effective in procurement profession. Since I have not worked in procurement, I will not be able to say specifically. It is hard to say whether women will need specific sets of skills to work in the procurement sector.

**Analysis of the expert interviews:** All three experts agreed that having women in the procurement profession helps and organization to be more effective. Dr. Khatun pointed out that including women will help an organization to get gender sensitive product/service. Both Ms. Khan and Hussain mentioned that women are more honest in comparison to men, in general. Since procurement involves monetary transactions and honesty, both the experts opined that women could be very helpful because they are usually honest. Ms. Hussain specifically mentioned that women are also more likely to work full office hour duration because of the job security.

### Key findings:

- Inclusion of women helps to procure gender specific product/services
- Women are less likely to be corrupt and more likely to be honest with their work
- Women are more likely to work full office hour duration

**Comparison with the survey finding:** Most of the respondents agreed that having female procurement/supply chain professionals helps an organization to be more effective. Most of the female respondents strongly agreed to this question and professionals from the development organizations tended to agree more on this question in comparison with the respondents from other types of organization.

#### 4. Question 4: Do you think that there is gender stereotype for the women procurement/supply chain professionals?

**Dr. Khatun:** There could be gender stereotype for the participation of women in procurement profession. From my experience in ADB, it was observed that women did not often participate in the procurement committees. However, it is absolutely essential to include women in the procurement committees so that gender issues such as community clinic layout, bench, medical equipment purchase can be tailored by considering the women users.

It is often thought that women do not have the education and qualifications to work in the procurement sector. Sometimes, the recruitment notices even mention that women are not encouraged to apply for the position. It signifies that many recruiters think that women will not be able to perform their tasks if they are hired. Again, it all relates to the social stigma we have in regards to the women.

**Ms. Khan:** For me, it is difficult to comment since I am not in the procurement profession. In general, the whole society in Bangladesh is in the transition phase. There are people who are pro-women, pro-women in the sense that they want to bring the women in the mainstream and they do not mind to bring women in the non-tradition profession. On the other hand, there are people who are stereotyped and say that this is not the profession for the women. But, we are going through a transition period. In fact, many women are breaking the cycle and they are coming out. Despite the complexities, women are joining the procurement profession.

**Ms. Hussain :** There might be. Chevron has many women employees in the supply chain management (SCM). After HR and finance departments, SCM has the largest representation of women employees. But when you are dealing a small and medium enterprise, the people will expect that male employees will communicate with them. When I used to do field works for the Swiss Catalyst, people would often ask me whether I have a

male companion with me. Hence, there is some sort of gender stereotype. Considering all those aspects, an organization may think that they should hire a male worker. So, culture plays more important role more than anything.

**Analysis of the expert interviews:** Dr. Khatun pointed out a very important aspect of gender stereotype that exists in procurement/supply chain job in Bangladesh. She rightly mentioned about the fact that many organizations do not even consider applications from the female as they restrict applications to the male professionals only. Ms. Khan indicated that our society is going through a transition phase and we might see exceptions like participation of women in the non-traditional jobs. Ms. Hussain highlighted that there are cultural stereotype in Bangladesh. Many vendors and customers expect to communicate with males rather than female in the field and grass root level. Hence, participation of women might be difficult for the women which requires frequent contact with local vendor and grass root level organizations.

**Key findings:**

- Because of the perceived weakness in women's education and qualifications, employers try to eliminate female professionals from the recruitment process by eliminating them from the application.
- Our society is going through a transition phase and there might be female workers to the non-traditional female job types.
- There is cultural stereotype in the grass root and field level. Customers and vendors might expect to communicate with male rather than female because of the cultural norm and tradition.

**Comparison with the survey findings:** There were mixed response relating to the gender stereotype of procurement/supply chain profession. On average, there was neutral rating and female are more likely to disagree to the fact that there is gender stereotype in procurement/supply chain profession in comparison with the male respondents. The experts pointed out some important gender stereotypes for the women. The researcher conducted extensive search on the application restriction for the women and found many job announcements for reputed for-profit organizations which restricted the participation of female professionals. In addition, one of the case studies indicated that there are cultural stereotype regarding the participation of women in this profession.

**5. Question 5: Do you think that male procurement professionals are more effective compared to the women in general?**

**Dr. Khatun:** No I do not think so. The points placed in response to question number 3 above, I strongly support that women are to be engaged along with men as procurement professionals to ensure effective and equitable program management.

**Ms. Khan:** I don't think so. When I started my profession back in 1980s, and now in 2016 there many things already changed in the context of this country. As long as the women are properly educated and skilled and if they know the work, they will do will. But, we have to make sure that there is a system in place to support the women. For examples, there should be some very strict laws and regulations. In addition, there should be a good law and order situation. There should be a stability and system in place to punish the culprits. Hence, I don't think that male workers are more effective in procurement.

**Ms. Hussain :** Like I said before, apparently, I do not see any specific reason for men to be more effective than women. If you compare a woman and man in the same position in a neutral situation, they should perform equally. There could be variation based on capabilities but man and woman both can be good. There is no specific reason but like I said, in the grass root level if a man works for the contract management as opposed to a woman, the man will be more effective because customers will value a man more than a woman.

**Analysis of the expert interviews:** Dr. Khatun strongly disagreed that male could be more effective in comparison with the female. She also stressed that female engagement with male are required in procurement. Ms. Khan also disagreed on the notion and pointed out that as also as female are educated and skilled they can be effective in the procurement profession as well. However, she also mentioned that there should be adequate law and order in place so that culprits can be punished. Ms. Hussain stressed that except the cultural barrier and stereotype, she does not see any specific reason why women cannot be effective in procurement/supply chain profession. Hence, all the experts actually agreed on the fact that female professionals can be equally as effective as male professionals in the procurement/supply chain profession.

#### **Key findings:**

- There is no reason to believe that women will be less effective in comparison with men in the procurement/supply chain profession.
- There could be some hindrances for women such as cultural barrier and unequal application of law and order

**Comparison with the survey findings:** Most of the responded agreed that female procurement/supply chain professional could be more effective in the development organizations in comparison with the for-profit organizations. The development professionals and female respondents agreed more on this topic in comparison with the male respondents and respondents from other type of organizations. In line with this findings, the experts opined that female could be as effective in the procurement/supply chain profession as the male professionals.



**6. Question 6: What do you think could be the reason(s) for women to perceive that procurement/supply chain profession is challenging in the context of Bangladesh?**

**Dr. Khatun:** The reasons are:

- Patriarchal attitude where men think market is their domain of work;
- Infrastructure related and societal law and order situations are not that conducive towards women's mobility and access to information;
- Women are yet to receive/get access to relevant skills development orientations/training;
- Women need support to fulfill legal formalities like getting license for supply chain management;
- Access to institutional credit is a barrier – women do not possess fixed asset to ensure collateral;
- Collaboration in between different pieces of the chain (value chain) needs efficient management which is still to be nurtured.

**Ms. Khan:** It involves lots of negotiation. Often, women lack the negotiation skills because of the socialization. Mostly because of the reason how they are treated in the socially as a whole and how they are being brought up in their families. Hence, in terms of bargaining power and negotiation, women as a whole are lagging behind the men. And, I understand that the negotiation skill is one of the major skills required for the procurement profession. If we actually, equip the women with required skills and bring them up in an equal environment, they will feel more comfortable to join the procurement profession.

**Ms. Hussain :** Stereotype mentality of your clients and cultures. There should not be anything else.

**Analysis of the expert interviews:** Dr. Khatun laid out six well thought out reasons for the perceived challenges for the women to participate in procurement/supply chain profession in the context of Bangladesh. The last point that Dr. Khatun made was not comprehensible to the researcher. Hence, that point was taken out from the findings but others were kept in the finding section. Ms. Khan mentioned that women lack negotiation skills because they are not usually brought in the environment which allows them to learn and practice the negotiation skills. She opined that if women are provided the right skills and if they are brought up in the equal environment, they will feel comfortable to join the procurement/supply chain profession. Ms. Hussain pointed only about the stereotype mentality and culture as the main reasons for the women to perceive that it is challenging for women to participate in the procurement professions.

### Key findings:

- Patriarchal attitude where men think market is their domain of work;
- Infrastructure related and societal law and order situations are not that conducive towards women's mobility and access to information;
- Women are yet to receive/get access to relevant skills development orientations/training;
- Women need support to fulfill legal formalities like getting license for supply chain management;
- Access to institutional credit is a barrier – women do not possess fixed asset to ensure collateral;
- Lack of negotiation skills due to social upbringing and norms does not help women in Bangladesh to acquire negotiation skills which is an important element of the procurement/supply chain profession.
- Stereotype mentality of the clientele and culture are also responsible for women to consider this profession as a challenging one.

**Comparison with the survey findings:** It is notable that the most of the professionals picked the set answer of “employers prefer male over female for this profession” as the perceived challenge for the women to participate in this procurement/supply chain profession. In addition, many respondents also picked the set answer of “it requires long working hours” and “it is hard working profession”. In addition, seven professionals provided their own texts (opinions) regarding this question. Interestingly, none of the responses from the experts matched with the set answers and responses received from the professionals. It is notable that the experts provided more in depth idea and root causes for the challenges rather than the immediate reasons such as hard working profession, inflexibility, etc. The inputs from the experts brought some insightful thoughts about the perceived challenges for women. Hence, the comment from the experts will be considered along with the survey responses.

### **7. Question 7: Based on your experience, what do you think about women's participation in procurement profession in Bangladesh?**

**Dr. Khatun:** Women participation is a necessity to ensure effective and equitable program management for results. In organizations both profit and non-profit, women should be included in procurement committees for gender sensitive procurements. Capacity building of women in procurement is important.

**Ms. Khan:** I think there are many opportunities for women to participate in the procurement profession. Specially in the public sector where there is a perceived phenomenon of corruption and inequality. I think women in general are more honest compared to the men and they will be able to positively contribute to this profession. I am sure that women are capable of doing a very good job in the procurement profession.

**Ms. Hussain :** My experience is very good. When I was in USAID, there was only one lady in USAID though she left later. There are many women employees in Chevron. I do not have the ratio right now. In fact, there are three category managers in SCM and one of the biggest categories is being handled by a woman who is in our age and she is very successful in her job.

**Analysis of the expert interviews:** Dr. Khatun emphasized on the importance of the participation of women in the procurement/supply chain profession. Ms. Khan mentioned that there are many prospects and opportunities for women to participate in the procurement/supply chain profession. She mentioned that female professionals can add value to the public procurements being honest to their work. She opined that women are capable to perform well in the procurement/supply chain professions. Ms. Hussain stressed that women are doing well in the procurement profession and they are joining in this profession.

#### **Key findings:**

- It is important to have participation of women in the procurement/supply chain profession in order to have equitable and gender sensitive procurement decision.
- There is scope for the capacity building of the procurement profession
- There are many opportunities for women to participate in the procurement/supply chain profession.
- Women can participate more in the public sector procurements because women are honest dedicated to their jobs and public sector procurement may often involve corruption
- Women are doing well in the procurement profession
- The number of female procurement professionals is increasing in our country.

**Comparison with the survey findings:** Since there was no comparable question in the survey, the inputs from this question can be used to make recommendation and conclusion of this dissertation.

## **8. TRIANGULATION AND SUMMARIZATION OF FINDINGS AGAINST RESEARCH OBJECTIVES**

### **1. To understand about the general profile of the procurement/supply chain professionals:**

- Bangladesh has a high rate of labor force increase per year for the inclusion of female work force. However, female workforce is far behind in comparison to the accomplishment of higher degrees in comparison with the male work force.

- Participation of female in administrative and professional positions is very low in Bangladesh and in the world.
- Family responsibilities such as rearing small children and completing household works often are the major reasons why female do not participate in the professional/administrative positions.
- All the survey respondents have at least bachelors/BA degree. It is expected that the procurement/supply chain professionals will be highly educated.
- Average age of the respondents was 36.39 and average experience was 10.90 years.

## **2. To find out the participation rate of female procurement professionals in the Bangladeshi development organizations:**

- Participation rate of female procurement professional as whole is low (12.10%) in comparison with male.
- Participation of female in the development organizations is much higher (29.73%) in comparison with the other types of organization.
- Gender experts think that participation of women can be increased further by increasing the skills sets for this profession and allowing higher education.
- Participation is often hindered by stereotype from local vendors.

## **3. To understand how and why people become interested to serve in the procurement/supply chain profession:**

- Many respondents think that this is a challenging profession and it has great prospects.
- Most of the respondents did not have prior procurement experience and education before joining their current procurement positions.

## **4. To find out opinions from professionals regarding different aspects of women's participation:**

- **Sufficient participation of women in this profession:** Most of the respondents (85.12%) think that participation of women in procurement/supply chain profession is low in Bangladesh.
- **Conducive work environment for women to work in this profession:** There was mixed response on this but female and development organization professionals agreed more that their organizations have conducive environment for the female procurement/supply chain professionals.
- **Possible gender stereotype:** Mostly neutral rating. Female professionals disagreed more that there are gender stereotypes in the procurement/supply chain profession. However, the experts indicated some valid and credible gender stereotypes which were substantiated through case studies.

- **Effectiveness and efficiency of female in comparison with the male professionals:** Most of the respondents disagreed that male could be more effective and efficient in the procurement/supply chain profession in comparison with the female.
- **Positive attitude towards the participation of women:** There are mixed response about the fact that having female procurement/supply chain professionals helps an organization. Female and development organization respondents agreed more on this.
- **Possibility of challenges for the female professionals:** Most of the respondents agreed that there are challenges. However, female respondents disagreed more on this topic in comparison with the male respondents. The experts also mentioned that there are perceived challenges for the female procurement/supply chain professionals.
- **Effectiveness of female professionals in development organizations:** There were mixed response and mostly neutral response. However, female and development professionals were more likely to think that women could be more effective in development organizations in comparison with the other types of organizations. The experts provided divided opinion on this topic.

#### **5. To explore the perceived challenges for the female professionals**

- Most of the respondents thought that employees prefer male over female. This fact was further verified through a case study and review of some of the recently published job announcements for the procurement/supply chain professions. It was observed that many organizations actually restricted their jobs only for the male applicants.
- Experts indicated reasons such as support services, patriarchal attitude, lack of relevant skills, lack of negotiation skills and stereotype mentality.

#### **6. To find out possible ways to integrate women in the procurement/supply chain profession:**

- Most of the respondents opted for the training and more flexibility.
- The issue of flexibility also came from the expert interviews
- Experts also mentioned that there is scope for the capacity building in this profession.

### **9. OVERALL FINDINGS**

- Experts agreed that women are more likely to be honest and dedicated to their work. Experts also mentioned that participation of women will ensure transparency and accountability to this profession because this profession involves monetary transaction. Experts also mentioned that the inclusion of women in this profession will also help gender specific purchases.
- Globally, women are more likely to participate in the more informal and less paid jobs in comparison with male counterparts.

- The increased supply of female work force does not necessarily means increased participation of women in the management positions. Experts and secondary data analysis indicate that women are doing mostly informal and blue collar jobs in comparison with the male work force.
- Demand for the female workforce in the corporate sector is probably low. Corporate sector probably tries to encourage male applicants for the procurement/supply chain positions. This issue has been identified by the experts as well.
- Early marriage is an important reason why many women do not complete higher education and participate in the management positions.
- Women in Bangladesh are more likely to participate in the flexible and irregularly paid jobs as they might need more time for the household works. This does not help women to participate in specialized position such as procurement/supply chain.

## 10. HYPOTHESIS TESTING

From the above discussions the following research questions are answered:

- **Are women actively participating procurement profession in the Bangladesh context?**- No. The survey response clearly represents that only 12.10% female participate in the procurement/supply chain profession. There are six times more male in the and administrative positions in Bangladesh in comparison to the female.
- **Is there sufficient representation of women in procurement profession in the Bangladeshi development organizations?**- No, only 29.73% representation of female procurement professionals in the development organizations. Though the situation is much better compared to the government and for-profit organizations, 29.73% representation cannot be considered sufficient.
- **What are the hindrances of participating in procurement profession from the women's perspectives?**- There are several hindrances of participating in procurement profession from the women's perspective. Examples are: employer's preference for male, patriarchal attitude, lack of skills and education, inflexibility, etc.
- **What are the prospects of choosing procurement career for women?** – Bringing honesty and dedication for the profession, gender specific procurement, etc.

It is evident that participation of female procurement/supply chain profession is low in development organization. In addition, there is not sufficient female in the management and decision making positions in comparison with males. Beside that women face multiple difficulties in terms of participating in this profession in the context of Bangladesh. Hence, the null hypothesis "Women have equal participation in the procurement profession in Bangladeshi development organizations" **cannot be accepted** in the context of the survey data, expert interviews and secondary data analysis. So, the alternative hypothesis is accepted.

## 11. RECOMMENDATIONS

The following recommendations are made regarding the participation of women in the procurement/supply chain profession in light with the findings from the study:

- Barrier to the entry such as restrictive job announcement should be eliminated in order to allow greater participation of female professionals.
- The skill level and education opportunities should be increased for the women so that they can participate in the professional positions.
- Female professionals should be provided more flexibility in the working hours so that they can balance their work and life.
- The social and family responsibilities such as cooking and rearing children should be shared with male partners in order to allow female professionals to participate in this profession.
- The female professionals should have access to the support services such as day care, transportation, breast feeding facilities, prayer room, etc.
- The organizations should have established mechanisms such as “Equality Ombudsman” to counter against the unequal treatment to the female professionals
- More training opportunities should be created for the female professionals in order to allow female professionals to acquire the required job skills.
- The local vendors and suppliers can be coached and oriented on the participation of female professionals.
- Gender sensitivity training and orientation can be provided to the male co-workers.
- Women should be considered equal member of the society so that they can excel in their studies and skill development from the very beginning.
- The negotiation skills of women can be development through on the job-training.
- Women professionals shall have the authority to bind the organization in the purchasing decisions.

## 12. LIMITATIONS OF THE STUDY

- **Small sample size:** The sample size for the survey was only 41. This may be too small to represent the population. The population size of number procurement/supply chain profession is also unknown.
- **Lack of Experience:** The researcher did not conduct a similar study like this one before and it was a very unique experience.
- **Few expert interviews:** Only three expert interviews were conducted which was probably small for drawing conclusive findings.
- **Dependency on primary data sources:** The researcher did not find similar kind of study being conducted in the context of Bangladesh. In fact, the researcher did not find any relevant research in the context of other countries. There were many

articles and journals on the women empowerment. However, most of the contents of the journals and articles were irrelevant in the context of the study. Hence, the researcher had to rely heavily on the primary data.

- **Quick response from the respondents:** Few respondents completed the survey within very short time. According to the test surveys, proper completion of the survey should take around 15 minutes. Some of the respondents even took more than 30 minutes to respond. However, few respondents took very short time to respond to the questions which might not result in thoughtful response.
- **Lack of interest from the professionals to participate in the survey:** Many professionals were requested to participate in the survey but only handful of professionals participated. Many professional provided responses only after multiple follow-ups and reminders.
- **Lack of time and resources:** It takes lots of time and resources to conduct a quality research following structured research methodology. In such a short span of time, it was not possible to conduct a full scale conclusive research.
- **Exploratory nature of the research:** The research was not a formal conclusive research. As a result, statistical tools were not used exclusively in this research. This decreased the validity of the research. However, the researcher tried to triangulate the primary data (survey and expert interview), secondary data (literature reviews) and case study findings to come up with valid reasoning for each of the research objectives.

### 13. SCOPE OF FURTHER STUDIES

This study revealed the scopes of further studies on participation of women in the procurement profession. The scopes of these studies are described below:

- I. Barriers for the entry for the female professionals to participate in the procurement/supply chain profession
- II. Trend analysis on the participation of women in the procurement/supply chain profession
- III. Finding specific reasons for lack of participation of women in the administrative and managerial positions in the context of Bangladesh
- IV. Comparison of participation of women in procurement/supply chain profession with other functional units such as finance, accounting, HR, technical field, etc.
- V. Study on the participation of women in the to level managerial positions in the context of Bangladesh
- VI. Efficiency study for male and female participation in the procurement/supply chain profession
- VII. Study on the effectiveness of female and male professionals in the procurement/supply chain profession
- VIII. Analysis of the perceived stereotype for the participation of women in the procurement/supply chain profession



- IX. Study on the sustainable procurement practice and participation of women
- X. Analysis of the job requirements for the procurement/supply chain professions.

## 14. CONCLUSION

The study reveals that there is not sufficient participation of women in the procurement/supply chain profession in Bangladeshi development organizations. However, there are more participation of female procurement/supply chain professionals in development organizations in comparison with for-profit and government organizations. It was also observed that overall participation of women in the managerial and administrative positions are very low in comparison with the male counterparts. There seems to be a general tendency among the employers to prefer male professionals in comparison with the female professionals. In addition, women sometimes lack the education and skill sets required to be efficient in the procurement/supply chain profession. Both the experts and survey respondents indicated that there are huge prospects for the women to participate in this profession. However, female professionals may need additional flexibility, support service, training and equal treatment. There is no reason to believe that women will be equally effective as male in this profession. In fact, participation of female might bring honesty, dedication and diversity in the organization. Hence, it is essential to encourage the participation of female in the profession. There are many scopes of future research in this field and many respondents think that there are good prospects in this profession. Female professionals can definitely tap in to the opportunities and show their talents in this profession.

**[End of the Dissertation]**