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MAFRAQ LABOR FORCE DEMAND AND SUPPLY PROFILES

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MAFRAQ LABOR FORCE DEMAND AND SUPPLY PROFILES

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ACRONYMS

MDC	Mafraq Development Corporation
IDA	Irbid Development Area
KHBTDA	King Hussein Bin Talal Development Area
MDA	Mafraq Development Area
IDA	Irbid Development Area
DOS	Department of Statistics
NCHRD	National Center for Human Resources Development
NEC	National Employment Center
VTC	Vocational Training Corporation
MOL	Ministry of Labor
CSB	Civil Service Bureau
GDP	Gross Domestic Product
CV	Coefficient of Variation
EAR	Economically Active Rate
MOU	Memorandum of Understanding
TOR	Terms of Reference
TVET	Technical and Vocational Education and Training
IMF	International Monetary Fund
WB	World Bank
ILO	International Labor Organization

PROJECT SUMMARY

BACKGROUND

According to the National Agenda, the unemployment rate in Jordan is around 14% but could reach the alarming rate of 20% by 2015 should conditions remain the same. 40% of the Jordanian population is economically active, which means that they are considered part of the workforce. The economically active population is divided into 87% employed and 13% unemployed. The labor market in Jordan is characterized by the dominance of well-educated Jordanian males and females, but limited in the supply of skilled Jordanian labor, whose insufficiency is supplemented by the employment of foreign workers.

One solution for the high unemployment rate is the creation of Development Areas that can host labor-intensive industries in remote Governorates. Under the Royal Leadership, Jordan has announced Development Areas in Irbid, Mafrq, Ma'an, Dead Sea and Ajloun.

The SABEQ program is supporting Development Areas in their efforts to attract new high-quality investments, through providing technical assistance and consulting services. One of the critical factors affecting the decision of the investor was the quantity, quality and availability of labor force. In order to provide investors with valid information about the labor force, a scientific study of labor situation reflecting supply and demand was required. Therefore, the SABEQ program contracted Dajani Consulting to carry out the Labor Force Supply and Demand Study first in Mafrq as a pilot governorate, to identify the labor profile and the gaps within the labor market. The study methodology and tool will be adopted to carry out similar labor force studies for the other Development Areas.

This report includes the details of the study, organized in three sections in addition to the appendices:

Section A. Research Design for the labor supply and demand study in Mafrq and Irbid

Section B. Labor force demand study in Mafrq

Section C. Labor force supply study in Mafrq

OBJECTIVES

The objective of the Labor Force Demand Study for Mafrq is to identify the quantity of possible job opportunities that may be offered by the potential investors in the Mafrq development area. The study also aims at determining the different aspects of the required positions such as work-environment, education, skills, salaries, compensations, benefits and human resources policies. This will provide updated information for MDC to plan its support and coordinate activities with the training providers in order to serve the investors needs.

The main objective of the Labor Force Supply Study is to assess the labor market in each governorate, and identify the characteristics of the available workforce in order to compare it to the labor force demand at a later stage. The study aims at classifying and analyzing detailed information collected from workforce (personal characteristics, methods of looking for work, previous occupations, education skills and so on). The study also aims at producing a variety of indicators describing the status of the labor market in each governorate, including the percentage of the employed, the number of hours worked, and the percentage of the unemployed. This will provide updated information for MDC to plan their policies and action plans in order to absorb and rehabilitate the labor force to fit the labor demand requirements of development zones in particular and the governorates in general.

The overall objective of demand and supply studies is to develop a comprehensive labor profile database of Irbid and Mafrq, including the templates and tools, for use in other Governorates in the future. Another objective is to provide specific updated information about the labor force in Irbid and Mafrq to MOL, in order to feed into its National Electronic Employment System.

METHODOLOGY

Based on the TOR issued by SABEQ for this project, the methodology for conducting the labor force supply and demand study included the following stages:

1. After a review of the population, labor statistics and previous reports of Mafrq, a preparation of a research design took place. The research design included detailed steps for conducting labor force supply and demand surveys. (section A)
2. Identifying target segments, the target segment of the Labor Force Demand Survey included potential investing companies in KHBTDA. The target segment of the Labor Force Supply Survey included a sample of the population of Mafrq representing unemployed and employed who are searching for jobs.
3. Creating a survey tool (questionnaire) for the Labor Demand Survey; this was tested and finalized in the form of a data sheet (Excel). The sheet was categorized with the following topics: basic information of the company, labor demand characteristics, labor demand factors and human resources planning.
4. Implementation of labor demand survey by contacting and interviewing key personnel at the potential companies of KHBTDA. The interviews focused on completing the survey tool with current and future labor needs of the company, and the aspects of the available positions and jobs such as required qualifications, skill level, benefits and salary.
5. Analysis of the collected data and preparation of the labor force demand profile (Section B).
6. Development of the Labor Force Supply Survey Tool (questionnaire) which was used in collecting data from the workforce. The questionnaire passed several review and testing steps until it was finalized. The final version of the questionnaire was in Arabic and consisted of two forms; one for the employed and the other for the unemployed. The questionnaire forms included a cover letter by MDC to participating people.
7. Preparation of sample, data entry frame and fieldwork plan for the survey. Training of the survey team and data entry staff was provided by Shabakat Al Ordon.
8. Launch fieldwork in Mafrq, covering all geographic locations and interviewing the sample of the target segment under supervision of the team leaders. The survey team was supported by awareness and facilitation efforts by MDC and SABEQ.
9. Examination and quality control of the collected data before data entry. Verification and validation processes of data were also performed.
10. Statistical analysis of the entered data and preparation of the labor force supply profile (Section C).

The labor demand study population consisted of a total of eight anchor tenants (investors) representing manufacturing, logistics and warehousing companies in KHBTDA. Six anchor tenants completed the survey successfully.

The labor supply study population covered Mafrq's governorate population which is estimated at 269,000 (DOS 2007). A Stratified sample of 836 of the population (people aged 16 years old and above) was taken as a representative sample. The sample was distributed proportionally among administrative divisions of Mafrq. The sample was divided according to gender to 433 males and 403 females. An additional 117 people were added to the sample to ensure accuracy and reliability and fair representation of all community segments.

RESULTS And CONCLUSIONS

The Mafrag labor force supply and demand study was implemented during the period November 2008 to May 2009.

Labor Force Demand Profile

1. Six companies completed the survey for the Labor Force Demand Study. Most companies of KHBTDA expect to operate with 50% of their production capacity during the first year of operations. The total number of expected jobs in the companies was 546.
2. In manufacturing companies, the management positions represent 15% of the labor demand; production and operations jobs represent 55%; quality control and assurance jobs represent 5%; technical and maintenance jobs represent 9%. The remaining jobs in other department represent 14%.
3. In logistics and warehousing companies, the management positions represent about 10% of the required labor, the operations and support jobs (maintenance assistance, drivers, cleaners, guards) represent 60% of the required jobs, while the remaining 30% jobs are distributed among stores, marketing, and sales departments.
4. Management and administrative department positions included more than 15 job titles ranging from General Manager, CEO, Board Members, to Receptionist and Telephone Operator's jobs. From management jobs, top managerial positions are expected to be held by managers residing outside Mafrag, while secretarial and administrative assistance positions could provide potential jobs for Mafrag's workforce.
5. Production and operations department positions included more than 30 job titles, which ranged from production manager to production workers. In general, the production department could provide adequate job opportunities to Mafrag's workforce. The required jobs in the other departments were less in quantity and required high qualifications. In particular, support department jobs are attractive and accessible by Mafrag's workforce.
6. More than 67% of the available jobs are located at the production department. Regarding work environment of the available jobs, 32% of the jobs are in a comfortable environment, while 45% are in an edgy environment (noise, hot).
7. According to companies, most of the available jobs (96%) require males to do the work.
8. Labor demand by education level showed that about 25% of the jobs require the general secondary certificate only, while 21% of the available jobs require a university degree. There is also a need for VTC graduates because 19.5% of the available jobs require this vocational level.
9. In terms of previous experience, about 23.5% of the available jobs require inexperienced labor, while only 3% of the available jobs require more than 8 years of experience.
10. Logistics and warehousing jobs require storekeeping, forklift driving and English language skills. Manufacturing jobs require production management, project management and technical skills (e.g. metal forming).
11. The available jobs also require some personal skills and competencies. Most highlighted skills and competencies include working under pressure, ability to learn new skills, supervisory skills, English language and technical skills specific to the job.
12. In terms of job benefits, over 40% of the available jobs offer social security membership as mandated by law, 33% offer medical insurance and 22% include transportation. Recruitment of labor for the available jobs is mostly done through newspaper advertisements and referrals. The most difficult jobs to be filled are top management positions, where it might take more than 6 months to recruit the suitable manager.

13. Salaries of available jobs vary according to the department and the job title. For management and administration assistant positions, the salary scale was between 500- 3500 JD. For middle management and supervisors positions, the salary scale was between 350 – 1000 JD. For lower management, technicians and frontline workers, the salary scales was between 350 – 600 JD.

Labor Force Supply Profile

1. Review of official statistics provided by DOS revealed the basic labor indicators in Mafrqa for the years 2007 and 2008. The total population of Mafrqa was 269,000 in 2007 and 275,000 in 2008. The population is divided into economically active segment 36% and economically inactive segment of 64%. About 86% of the economically active are employed, while 14% of the economically active are unemployed.
2. In terms of gender, males account for 84.8% of the economically active segment in Mafrqa, while females account for 15.2% only. Unemployed males represent 68.6% of the total unemployment, while females represent 31.4%.
3. The Labor Force Supply Survey included a sample of 836 persons in the different areas of Mafrqa. To ensure accuracy and equal representation of all Mafrqa's population, the sample size was increased to reach about 950 persons. The sample consisted of 50.3% males and 49.7% females. 54.8% of the sample were single, while 42.6% of the sample were married.
4. The workforce varies in its educational qualifications. Approximately 9.2% of the sample is elementary school graduates, 57% holds a secondary certificate, 21% holds university degrees, 6.7% holds intermediate community college diploma and 6.1% of the sample holds a vocational level degree.
5. The received training of the sample varies between the fields of training. For example, 34.5% of the sample gained training in administrative and commercial fields, and 32.3% had training on IT. Only 13.6% gained training in the field of technical and vocational skills.
6. 65% of the employed work in the public sector, while 35% works in the private sector. The study shows also that 74% of the employed females work in the public sector, while 60.5% of the employed males work in the public sector.
7. It is worth mentioning that 44.6% of the employed are looking for new jobs for different reasons (mainly financial).
8. The study sample in Mafrqa has gained business-related skills. About 69% of them gained English language skills (reading and writing), 59% gained computer applications skills, 23% gained business and office management skills, 17.3% gained general accounting skills, while 80% of the sample gained typing skills and handling tools.
9. About 63% of the sample members are searching for jobs, including employed and unemployed. More than 50% of the job seekers in Mafrqa prefer to work in the public sector, particularly females. Preferable jobs among workforce include data entry, telephone operator, secretarial work, production workers/supervisors, administrative managers and top management.
10. Most of the sample fall within the salary scale of (JD100 – 300) in terms of previous or current job, while most of them expect a salary scale of (JD 200 – 400) in terms of the new desired job. Only 11% of the sample declared that they have personal source of income
11. About half of the workforce is available to start a new job instantly, while about one third is reluctant to start a job within a limited or short period of time. Males are more readily available for instant job filling than females.

12. Females face difficulties in obtaining and keeping jobs. When searching for jobs, females usually encounter the problem of low wage compared to male colleagues, while during the job, females are commonly affected negatively by transportation and commuting difficulties. Most females think that the suitable work environment for women are the ones requiring short daily working hours.
13. About 67% of the interviewed workforce accepted to enter their information in the National Electronic Employment System (NEES) of MOL.

RECOMMENDATIONS

1. The process of monitoring the relationship between investors (or employers) and employees (or workforce) should be institutionalized by regulatory institutions and KHBTD A developer. This means that recruitment process and job placement of labor in KHBTD A should follow clear regulations under monitoring and inspection by MDC and governmental authority such as MOL and Social Security Corporation.
2. KHBTD A should provide specialized training for workforce. The responsibility of entry-level training could be assigned to an independent training institution, while the advanced training should be the responsibility of the investors. Incentive scheme could be offered to investors for training the workforce.
3. To bridge the gap between skill demand and supply, training should focus on fields like technical skills (machinery operation, maintenance, metal forming, storekeeping, office management, general accounting) and personal skills (English, time management, team work, supervisory skills, work ethics). VTC could play a major role in developing and delivering such programs.
4. To utilize the available workforce who do not have higher educational degrees to match the available jobs and provide them with the basic training. More attention should be given to vocational level and diploma graduates in the industrial and logistics fields.
5. Special educational programs should be provided to workforce to qualify them for positions such as quality control technicians, cold storage workers, electromechanical maintenance technicians, packaging workers, production supervisor, vehicles maintenance technicians and others.
6. A number of solutions should be introduced to eliminate work barriers and increase recruitment and job stability such as provision of adequate work environment and more fringe benefits or incentives including transportation and medical insurance.
7. In terms of gender, women participation in the Mafrq labor market can be enhanced by providing special working environment such as unmixed work environment (females only), safe transportation and children kindergarten within work location.
8. Establishment of communication and data center to increase the outreach and assist in linking unemployed labor with employers at KHBTD A through different means (newsletter, announcements, events).

A. RESEARCH DESIGN FOR THE LABOR SUPPLY And DEMAND STUDY IN MAFRAQ AND IRBID

EXECUTIVE SUMMARY

The SABEQ program is supporting the Mafraq and Irbid Development Areas in their efforts to attract new high-quality investments, through providing technical assistance and consulting services. One of the critical factors affecting the decision of the investor is the quantity, quality and availability of labor force. In order to provide investors with valid information about the labor force, a scientific study of labor situation reflecting supply and demand is required. Therefore, the SABEQ program contracted Dajani Consulting to carry out the Labor Supply and Demand Study first in Mafraq and then in Irbid, to identify the labor profile and the gaps within the labor market.

The first task of the study involved preparing a research design, explained in this document. The research design was based upon background information about Irbid and Mafraq Governorates which was obtained through literature review of official statistics and reports on employment and the labor market.

The most important component of the research design is the methodology. The methodology of conducting the Labor Demand Study implies collecting labor and employees' recruitment data from potential interested investing companies in the Development Zones, using a specifically designed tool (this being a questionnaire). The scope of the Labor Demand Study must cover all potential companies, since there are few of them at this stage. On the other hand, the methodology of the Labor Supply Study consists of preparation of a sample, development of a Survey Tool, testing of the Survey Tool, recruitment and training of Surveyors, an awareness campaign through the media, conducting a field survey on the target segment, data entry, data verification, data analysis, and reporting. The scope of the Labor Supply Study covers the population of Mafraq who are over the age of sixteen.

The fieldwork plan for the supply Labor Force Survey in Mafraq includes the sample size distributed on demographic and gender proportions, in addition to the number of Surveyors and a timeframe for conducting the survey.

The analysis of the Labor Demand Study shall concentrate on the quantity and quality of the required labor in terms of positions, skills, attributes, benefits, salaries and other factors. The analysis of Labor Supply Study shall yield indicators about the labor force status, preferences, criteria, conditions and others.

A1. STUDY OBJECTIVES

The objective of the Labor Force Demand Study for Irbid and Mafrq is to identify the quantity of possible job opportunities that may be on offer by the potential investors in the Irbid and Mafrq development areas. The study also aims at determining the different aspects of the required positions such as work environment, education, skills, salaries, compensations, benefits and recruitment policies. This will provide updated information for MDA and IDA to plan their support and coordination activities with the training providers in order to serve the investors' needs.

The main objective of the Labor Force Supply Study for Irbid and Mafrq is to assess the labor market in these governorates, and identify the characteristics of the available workforce in order to compare it to the labor force demand at a later stage. The overall objective of this study is to develop a comprehensive labor profile of Irbid and Mafrq, including the templates and tools, for use in other Governorates in the future. Another objective is to provide specific updated information about the labor force in Irbid and Mafrq to MOL, in order to feed into its employment databases and job application system.

A2. CLIENT

Mafrq Development Corporation (MDC) represented by Mr. Rami Qusus – General Manager.

A3. STAKEHOLDERS

- Ministry of Labor
- Development Zone Commission
- King Hussein Bin Talal Development Area
- Irbid Development Area
- Vocational Training Corporation
- Training and Employment Initiatives and Programs
- Local Community

A4. BACKGROUND

The Government of Jordan released its National Agenda in 2006, in which it is stated 23% of the population will have reached working age within the coming ten years; however the Jordanian economy does not have the capacity to absorb the annual inflow of job seekers. According to the National Agenda, the unemployment rate in Jordan is around 14% but could reach the alarming rate of 20% by 2015 should conditions remain the same. Forty percent of the Jordanian population is economically active, which means they are considered part of workforce. The economically active population divided into 87% employed and 13% unemployed. The profile of the unemployed in Jordan according to the Department of Statistics in 2007 includes 29% of Bachelor degree (BA/BSc) holders, and 45% of "*less than general secondary certificate*" holders. The labor market in Jordan is characterized by the dominance of well-educated Jordanian males and females, but limited in the supply of skilled Jordanian labor, whose insufficiency is currently supplemented by the employment of foreign workers.

The labor profile differs among Jordanian Governorates and cities, depending on the economic activities and investments within each Governorate. The study of the labor market of each Governorate assists in designing more responsive approaches in solving the unemployment problem, and preventing its effect from spreading to the main neighboring cities.

One of the solutions for the high unemployment rate is the creation of Development Areas that can host labor-intensive industries in remote Governorates. Jordan has four Development Areas in Irbid, Mafrq, Ma'an and Aqaba. Due to the lack of significant data and indicators about the labor supply in these governorates, it is essential to conduct a comprehensive study that would yield the required information.

Irbid governorate has the largest population in Jordan after Amman, while Mafrq is the fifth largest populated governorate in Jordan. The total population of Irbid is 1,018,700 while the total population of Mafrq is 269,000 (DOS, 2007). In principle, Irbid governorate provides more job opportunities than Mafrq due to its demographic and economic situation.

In general, about 58% of the population is within the age segment of 15 – 59 years old age segment (DOS, 2007), which represents the Jordanian workforce. This means that more than the half of governorate's population can be considered as the labor market. It is worth mentioning that this segment includes employed, unemployed and economically inactive persons.

Economic indicators show that certain sectors were the major contributors to GDP during the past ten years. For example, the average contribution of finance, insurance, real estate and business services sectors to the GDP was 18% during 1998–2006, while the manufacturing sector contributed an average of 14.5% and whilst transport, storage and communications contributed an average of 13.7% to the GDP (DOS, 2007). These results reflect upon the size of required labor for these sectors. Usually, the sectors with high contribution to the GDP are labor-intensive sectors, which absorb most of the labor force in the market.

Table 1: Estimated Population of Jordan 2007

Table 1 Estimated Population of the Kingdom by Governorate at End of Year 2007 (DOS, Yearly Statistical Book)		
Governorate	Total Population	Percentage (%)
Amman	2216000	38.7 %
Irbid	1018700	17.8 %
Zarqa	852700	14.9 %
Balqa	383400	6.7 %
Mafaq	269000	4.7 %
Karak	223200	3.9 %
Jarash	171700	3.0 %
Madaba	143100	2.5 %
Ajlun	131600	2.3 %
Aqaba	124700	2.2 %
Ma'an	108800	1.9 %
Tafileh	80100	1.4 %
Total	5723000	100 %

The employment and unemployment statistics reveal interesting facts. Most of the unemployed (76.8%) are concentrated in the age segment 20 – 39 years old (DOS, 2007). The majority of employed persons can be found in Amman and Irbid, while other governorates tend to have lower employment (DOS, 2007).

Table 2: Employment by Governorate 2007

Table 2 Employment by Governorate at End of Year 2007 (DOS, Employment and Unemployment Survey)		
Governorate	Total Population	Employment (%)
Amman	2216000	41.6 %
Irbid	1018700	17 %
Zarqa	852700	14.3 %
Balqa	383400	6.7 %
Karak	223200	4.1 %
Mafrq	269000	4 %
Jarash	171700	2.6 %
Madaba	143100	2.4 %
Ajlun	131600	2.2 %
Aqaba	124700	2.1 %
Ma'an	108800	1.7 %
Tafleh	80100	1.4 %
Total	5723000	100 %

Fact:

76.8% of unemployed are aged 20 – 39 years (DOS 2007)

A deep review of the current employment situation at Irbid and Mafrq shows useful indicators about the types of jobs and the employment patterns. 22% of the unemployed Jordanians are in Irbid, while 5% of the unemployed Jordanians are in Mafrq (DOS, Employment and Unemployment Survey 2007). The employed Jordanians in Irbid and Mafrq are distributed among several occupations, where certain occupations attract more Jordanians than other occupations. For example, 24.1% of the employed Jordanians in Irbid work in elementary occupations, while 17.8% of the employed Jordanians in Mafrq work in elementary occupations (DOS, Employment and Unemployment Survey 2007).

Table 3: Employment by Occupation in Irbid and Mafrq 2007

Table 3 Employment by Occupation in Irbid and Mafrq Governorates (DOS, Employment and Unemployment Survey 2007)		
Occupation	Irbid (%)	Mafrq (%)
Elementary Occupation	24.1%	17.8%
Craft & Related Trades Workers	14.3%	17.3%
Service Workers & Shop & Market Sales Workers	14.9%	14.9%
Plant & Machine Operators & Assemblers	12.2%	13.7%
Professionals	17.2%	13.4%
Technicians & Associate Professionals	10.1%	11.3%
Clerks	4.9%	7.7%
Skilled Agricultural & Fishery Workers	2.3%	3.4%
Legislators and senior officials & Managers	0%	0.6%
Total	100%	100 %

The most attractive sectors for Jordanian employment in Irbid include public administration and defense, education, wholesale and retail as shown in table (4). The same fact applies to Mafrq, but with addition to the transport, storage and communication, and agriculture, hunting and forestry. (DOS, Employment and Unemployment Report 2007).

Table 4: Employment by Sector in Irbid and Mafrq 2007

Table 4 Employment by sector in Irbid and Mafrq Governorates (DOS, Employment and Unemployment Survey 2007)		
Sector	Irbid (%)	Mafrq (%)
Public Administration and Defense (Compulsory Social Security)	25.7	31.3
Education	14.9	11.8
Transport, Storage and Communications	8.2	11.4
Wholesale and Retail Trade, Repair of Motor Vehicles, Motorcycles & personal & Household Goods	14.3	11
Agriculture, Hunting And Forestry	3.7	10.4
Other Community, Social And Personal Service Activities	5	5.8
Construction	6.9	5
Manufacturing	8.2	4.4
Health and Social Work	5.7	3.7
Electricity, Gas and Water Supply	1.6	2.3
Real Estate, Renting & Business Activities	2.4	1.4
Financial Intermediation	0.9	0.8
Mining And Quarrying	0.4	0.3
Hotels And Restaurants	1.6	0.3
Private Households with Employed Persons	0.3	0.1
Extra-Territorial Organizations and Bodies	0.1	0.1
Fishing	0	0
Total	100%	100 %

The unemployment rate among Jordanians in Irbid and Mafrq is due to several reasons. The most common reason for unemployment is the unavailability of job opportunities within the governorate according to the unemployed (DOS, Employment and Unemployment Report 2007). Table (5) illustrates the main reasons for unemployment as mentioned by the unemployed persons in Irbid and Mafrq.

Table 5: Reasons for Unemployment in Irbid and Mafrq

Table 5 Reasons for Unemployment in Irbid and Mafrq Governorates (DOS, Employment and Unemployment Survey 2007)		
Sector	Irbid (%)	Mafrq (%)
Believe No Work Available	55.2%	43%
Tired of seeking Work	7.1%	9.7%
Do not know How to seek Work	2.9%	3.3%
Can not find suitable work	17.9%	14%
Not Qualified	5.6%	15%
Other	11.5%	14%
Total	100%	100 %

Fact:

The most common reason for unemployment is the unavailability of job opportunities within the governorate according to the unemployed in Mafrq and Irbid (DOS 2007).

The labor market is a dynamic environment influenced by factors such as mobility and commuting of workforce. Usually, the residents of a governorate work in it, but some of the workforce come from neighboring governorates. For example, in Irbid 92.5% of the employees are residents of Irbid, while only 55.9% of the workforce in Mafrq reside in the same governorate (DOS, Employment and Unemployment Report 2007).

Table 6: Employment of Irbid and Mafrq by Place of Residence

Table 6 Employment of Irbid and Mafrq Governorates by the place of residence (DOS, Employment and Unemployment Survey 2007)		
Governorate	Irbid (%)	Mafrq (%)
Amman	1.2%	6.3%
Irbid	92.5%	19.9%
Mafrq	1.7%	55.9%
Jarash	1.3%	3.5%
Ajlun	1.7%	3.4%
Madaba	0.1%	1.2%
Zarqa	0.7%	5.4%
Balqa	0.3%	1.5%
Karak	0.3%	1.6%
Tafleh	0.1%	0.6%
Ma'an	0.1%	0.6%
Aqaba	0%	0.3%
Total	100%	100 %

A5. TARGET SEGMENTS

A. Labor Force Demand Study

The target segment is the potential investing companies in KHBTDA-Mafraq and IDA-Irbid. The list of companies in Mafraq includes nine companies, while the list of companies in Irbid is as yet, not defined. The companies belong to different industrial and service sectors.

MDA focuses on investment companies in the following sectors:

- a- Food industry
- b- Light chemicals
- c- Logistics and warehousing
- d- Pharmaceuticals and medical supplies
- e- Other manufactured products (e.g. engineering industries, electrical, equipment).

IDA focuses on investment companies in the following sectors:

- a- Information Technology
- b- Electronic Industries
- c- Light Industries
- d- Other manufactured products

B. Labor Force Supply Study

Since this study is a labor supply survey, it should cover the following segments in Mafraq and Irbid:

- a- Unemployed youth regardless their education level (Local community)
- b- Job seekers in the local community
- c- Jordanian residents of the governorates
- d- Other segments (Department of Statistics, NCHRD, and Ministry of Labor) as sources for secondary data.

A6. STUDY LIMITATIONS

A. Labor Force Demand Study

The Labor Demand Study may have the following limitations:

1. Limited number of target segment companies, which may reflect on the depth and accuracy of the study
2. Focus on certain sectors relevant to the available investments in the area may lead to excluding other potential sectors from the study
3. Most of the investments at the development areas are in the planning or construction phase, which may affect the accuracy of the study
4. The unavailability of the senior management of the company may delay the study

B. Labor Force Supply Study

The Labor Supply Study may have the following limitations:

1. Limited or lack of raw and updated data about the labor supply in these Governorates
2. The wide geographic area covered during the field survey
3. Lack of interest among target segments to participate in the study
4. Involvement of stakeholders may result in some delays
5. Difficulty of coordination between concerned parties may cause bottlenecks or delays

A7. STUDY METHODOLOGY

A. Labor Force Demand Study

The methodology to perform the Labor Demand Study includes:

1. Sources of data and information

- Secondary data: the Consultant shall collect and review available reports, studies, etc. MDC, IDA and other stakeholders may provide previous studies and information about the companies that would assist in designing the research.
- Meeting with stakeholders and client: the Consultant shall meet the MDC and stakeholders to agree on the contents and expected output of the
- Overview of similar activities: the Consultant shall arrange visits to model companies and investments operating in the targeted sectors, in order to define the parameters and indicators of the actual level of labor force in terms of age, sex, education, skills, experience, attitude, training and job duties...etc.
- Survey Tool development: [the Survey Tool developed by Consultants in cooperation with MDC and SABEQ]. It is based on previous tools used by MDC during analysis of the human resources needs of the potential investors. A Labor Demand Assessment Tool was prepared [and applied by MDC in cooperation with International Consultants early in 2008], as a part of a study about hiring challenges and advantages of Mafrag employers seeking Jordanian workers. A review of International Labor Demand Studies by Consultants was carried out to integrate essential and relevant points in the tool.

The tool comprises three main parts:

- Basic Information
- Labor Demand Profile
- Labor Demand Factors

The Tool was developed as a general questionnaire in Excel format, and then it was tested and customized to become sector specific. The Consultant presented the tools to MDC and the stakeholders to obtain their approval after making the required adjustments. The sector-specific versions included a cover page and instructions for completing the questionnaire. The questionnaire is targeting the key person responsible for human resources and employees in the investment companies. The questionnaire recommends completion in presence of the research Consultant, but if this is not feasible, the questionnaire is user-friendly and may be completed by the key person without assistance. The questions are in the form of tables and drop-down lists which facilitates answering

The basic information part contained the company's contact information, sector, status, activity, main processes, size of operations, main departments, sections and expected total staff number.

The labor demand profile part contained the job titles according to department and the job description or profile including type of work, location, workplace environment, sex, education level, experience, expected salary, technical skills, personal skills, benefits and compensations, in addition to recruitment process information.

The labor demand factors part contained a breakdown of the required human resources according to the recruitment plan of the company for the coming five years. It also included a ranking of the challenges faced by company regarding hiring employees when opening an investment in the Development Areas.

The Labor Force Demand questionnaire form is included in Appendix (1)

2. Study Population

As mentioned earlier, the target segments include potential investors in MDA and IDA. The list of MDA potential investors is included in appendix (2). The list contains ten companies in KHBTD that already signed a MOU with MDC. The list of companies in IDA is not determined yet.

3. Study Procedure

- Conduct interviews with key personnel or senior managers at the investing companies in the area using the developed tools, to collect the labor demand information and their perception on national and foreign labor.
- Review and analyze the collected information in comparison with the parameters and indicators of labor force.

- Classify the labor demand into categories based on the job type, skill level and the other parameters.
- Produce a draft report of the findings and analysis. The analysis shall yield collective information about the summation of the required workforce and the profile of the different positions planned for forthcoming recruitment by the companies.
- Submit the draft report to the MDC, IDA and stakeholders for comments.
- Amend and submit the final study report (in English).

B. Labor Force Supply Study

The overall approach based in three stages:

- a. Design and Preparation
- b. Conducting fieldwork
- c. Analysis and reporting

While Dajani Consulting shall carry out the first and the last stages, Shabakat Al Ordon as arranged by SABEQ shall carry out the fieldwork stage. The methodology will be applied to Mafrq as a pilot study, and then repeated in Irbid after completion of Mafrq pilot study.

The detailed methodology to perform the Labor Supply Study includes:

1. Design and Preparations

- Meeting with the client (MDC) and the stakeholders to agree on the expectations and the study plan. Issues regarding the impact of this study on employment, development of the private sector, involvement of the civil society, enhancing labor force skills and others points shall be discussed.
- Collect raw data (statistics, reports, studies) available on the labor market of Mafrq and Irbid from different sources including DOS, NEC, NCHRD, MOL, CSB and others.
- Review of previous information and studies completed on the labor market, particularly indicators pertaining to labor supply in Jordan in general, and Mafrq and Irbid in particular.
- Literature review: analysis and quality assessment of the collected data to produce a baseline profile of the labor force supply and population in Mafrq and Irbid. As a result, any gaps and deficiencies in the data will be detected and taken into consideration when designing the Survey Tool and methods. Certain criteria being used to classify and analyze the data such as economic-active age, gender, education, experience, employment record, employment locations and more. The baseline profile will also facilitate the design of the supply survey sample and tools.
- Development of the Labor Supply Survey tool for Irbid and Mafrq: the tool will be in the form of a questionnaire used to collect information during a face-to-face interview with the target segments. The design of the tool will take into consideration the objectives of the study, and integrate the previous surveys, the feedback of stakeholders, and the comments of the client within the questionnaire. First, a basic standard questionnaire is prepared, based on the questionnaires used by DOS in the employment and unemployment survey, other forms used by MOL and other organizations, but with customization and adaptation to serve the purpose of this study. More than one version of the questionnaire being developed whilst some questions to be addressed to all persons, via different manners, and other specific questions will be addressed to certain categories. Attention paid to the fact that questions must directly lead to the delivery of data related to the selected labor profile indicators. Only a few of these questions will be "open-ended", while the majority will be "closed-ended" questions (Yes/No, multiple choice) to facilitate data entry and analysis in later stages. Questions will concentrate on topics and issues related to the scope of the study such as:

- Age
- Gender
- Social status
- Number of family members
- Educational qualifications
- Specialization and level of education
- Training courses
- Skill type and level
- Employment status
- Current employment location
- Current job type
- Number of work hours
- Previous employment record
- Previous work location
- Qualifications and skills gained during previous jobs
- Income sources and value
- Permanent and temporary residence
- Job applications submission and rejection
- Reasons for leaving job
- Availability for employment
- Sector preferences (public, private, international, other)
- Economic activity preferences (industry, services, trade, transport...etc.)
- Salary expectations
- Compensation, benefits and incentives
- Location preferences (within governorate, outside governorate, outside Jordan)

The draft Survey Tool being tested in the field, then improved and approved by the stakeholders and the client.

- Pilot testing of the questionnaire in Mafrq, by two Surveyors where fifteen draft questionnaires were filled out with members of the target segment. A trial test of the Survey Tool was executed upon a small sample of fifteen persons, in order to detect problems or deficiencies in the survey tool. Main issues and difficulties encountered then were taken into account to better adapt and improve the quality of the tool. This led to some minor changes in the questionnaires. As a result, the survey tool became amended and improved to render it more applicable to the actual field - work. The expected amendments are re-phrasing of questions and answers, and re-organization of the questionnaire parts. Because of the testing, a number of modifications were then introduced to the questionnaire. A summary report of testing shall be prepared and submitted to MDC in order to approve the modifications. Ultimately, a final version was reached when a master copy of the questionnaire became ready. The summary report of testing is included in appendix (3), and copy of the Survey Tool is included in appendix (4).
- Sample preparation: The sampling methodology complies with the statistical standards and practices used in employment and unemployment studies. First, to determine the population of the study, it is essential to study the total population. Tables (7), (8) and (9) show the population projections at the end of year 2007 by district, gender and age for the two governorates according to the Unemployment Survey Report published by DOS. It is observed that Mafrq's population represents about 26% compared to Irbid's population. Irbid's population is composed of 51.2% males and 48.8% females, while Mafrq's population is composed of 51.8% males and 48.2% females. **The workforce can be defined as economically active persons from the ages of fifteen years and above.**

Table 7: Estimated Population of Irbid and Mafraq 2007

Table 7 Estimated Population of Irbid and Mafraq Gov. by Sex and District, at End-year 2007 (DOS, population projections)			
Administrative Divisions	Total	Male	Female
Irbid Governorate	1018700	521700	497000
Irbid Qasabah District	412170	211480	200690
Ramtha District	119770	60750	59020
Koorah District	99920	50970	48950
Bani Kenanah District	83840	42720	41120
Northern Aghwar District	93500	48310	45190
Bani Obeid District	102680	52350	50330
Northern Mazar District	48460	24970	23490
Taybeh District	31970	16440	15530
Wastiyyah District	26390	13710	12680
Mafraq Governorate	269000	139400	129600
Mafraq Qasabeh District	112050	57760	54290
Northern Badiah District	63570	32680	30890
Northern Western Badiah District	82580	42560	40020
Al Rwaished District	10800	6400	4400

Table 8: Estimated Population of Irbid by Sex and Age Group 2007

Table 8 Estimated Population of Irbid by Sex and Age Group, at End-year 2007 (DOS, population projections)						
Age group (year)	Male		Female		Total	
	No.	%	No.	%	No.	%
0-4	65665	12.59	62365	12.55	128030	12.57
5-9	66605	12.77	63915	12.86	130520	12.81
10-14	64915	12.44	61610	12.40	126525	12.42
15-19	61430	11.78	57555	11.58	118985	11.68
20-24	57210	10.97	52560	10.58	109770	10.78
25-29	47555	9.12	43055	8.66	90610	8.90
30-34	39605	7.59	38425	7.73	78030	7.66
35-39	30940	5.93	30130	6.06	61070	5.99
40-44	22780	4.37	22620	4.55	45400	4.46
45-49	16220	3.11	16010	3.22	32230	3.16
50-54	12240	2.35	12150	2.45	24390	2.39
55-59	10315	1.98	10375	2.09	20690	2.03
60-64	9620	1.84	8970	1.81	18590	1.82
+65	16600	3.18	17260	3.47	33860	3.32
Total	521700	100.00	497000	100.00	1018700	100.00

Table 9: Estimated Population of Mafrq by Sex and Age Group 2007

Table 9 Estimated Population of Mafrq by Sex and Age Group, at End-year 2007 (DOS, population projections)						
Age group (year)	Male		Female		Total	
	No.	%	No.	%	No.	%
0-4	19350	13.88	18260	14.09	37610	13.98
5-9	19480	13.97	18060	13.94	37540	13.96
10-14	17895	12.84	16985	13.11	34880	12.97
15-19	15790	11.33	14640	11.30	30430	11.31
20-24	14870	10.67	13320	10.28	28190	10.48
25-29	12520	8.98	11420	8.81	23940	8.90
30-34	10240	7.35	9560	7.37	19800	7.36
35-39	8025	5.76	7275	5.61	15300	5.69
40-44	5390	3.87	5000	3.86	10390	3.86
45-49	3770	2.70	3535	2.73	7305	2.72
50-54	3580	2.57	3050	2.35	6630	2.47
55-59	2480	1.78	2680	2.07	5160	1.92
60-64	2200	1.58	2150	1.66	4350	1.62
+65	3810	2.73	3665	2.83	7475	2.78
Total	139400	100.00	129600	100.00	269000	100.00

The sample of this survey is designed using the **stratified sample method**. The sample was designed and based upon the data of the employment and unemployment analytical report 2007 published by DOS. Relevant to this information, the sample size was estimated to provide results with CV (Coefficient of Variation) not more than 10%.

Due to the availability of data, the geographical area in which each Governorate was also taken into consideration in stratifying the population. Each district, in each Governorate is considered as an independent stratum, so the total number of strata in Irbid governorate is nine districts and in Mafrq Governorate is four strata and the grand total of all strata is thirteen. The sample being allocated amongst strata by the **"proportion to size"** allocation method, which takes into consideration the population size of each stratum to provide reliable results. Another important variable in the design of the sample is the gender, so the sample is further designed according to the proportions of males and females in the population. [Therefore, each stratum being divided into two sub-strata: males and females]. Using the stated assumptions, and the **"sample size calculation"** standard formulas, table (7) below illustrates the number of sample members selected in each stratum.

The sample size for the Employment and Unemployment Survey, which is conducted quarterly, in 2000 households in Irbid and 800 households in Mafrq, with CV of economic activity rate 1.53% in Irbid Governorate and 2.50% in Mafrq Governorate (table 8). The average employed person is 1.2 people per household, therefore the sample size is 3,360 persons, and due to expected non-response rate, additional 640 persons being then added to the sample, so the **final sample size equals 4000 persons**. This methodology can be adapted to the labor force supply survey.

Table 10: Sample Design of Irbid and Mafrq

Table 10 Estimated Sample Size of Irbid and Mafrq Gov. by Sex			
Administrative Divisions	Total	Male	Female
Irbid Governorate	3164	1620	1544
Irbid Qasabah District	1280	657	623
Ramtha District	372	189	183
Koorah District	310	158	152
Bani Kenanah District	260	133	128
Northern Aghwar District	290	150	140
Bani Obeid District	319	163	156
Northern Mazar District	151	78	73
Taybeh District	99	51	48
Wastiyyah District	82	43	39
Mafrq Governorate	836	433	403
Mafrq Qasabeh District	348	180	168
Northern Badiyah District	198	104	94
Northern Western Badiyah District	256	133	123
Al Rwaished District	34	18	16

Table 11: Economic Activity Rate and Coefficient of Variance

Table 11 Economic Activity Rate (EAR) and Coefficient of Variance (CV) by Governorate and Gender, 2007 (DOS, Employment and Unemployment Survey, 3rd quarter 2007)						
Age group (year)	Male %		Female %		Total %	
	EAR	CV	EAR	CV	EAR	CV
Irbid	64.4	1.37	14.5	5.20	39.1	1.53
Mafrq	61.1	2.35	12.8	8.11	37.1	2.50

- Prepare a survey design and fieldwork plan for Mafrq based on the labor supply questionnaire and sample profile. The fieldwork plan shall include the target segment sample size and geographic distribution in Mafrq proportional to population density at districts and sub-districts. The survey design will include the directions and instructions on how to use the Survey Tool, how to conduct the fieldwork, and how to monitor progress and overcome field obstacles. The fieldwork plan is included in appendix (5).
- The Consultant will then select methods for data collection, and analysis, preparation of the subsequent data entry frame.

2. Conducting Field Work

- Once labor profile indicators and targeted group become identified, the Consultant will be in a better position to prepare the set of survey instruments. It is useless to send questionnaires without adequate explanations and then very often these questionnaires are returned to the Consultant incomplete. The Consultant shall develop a training manual including the survey design, guidelines for surveyors, instructions for field supervisors and data entry procedures. The training manual shall be prepared in Arabic. The training manual will have the following components:
 - a. An *Interview Guide* to facilitate the interview, [The contents of the guide shall elaborate on the process of reaching and contacting the sample members].
 - b. Two other survey-supporting documents: a *Questionnaire User Guide/ Manual* [for the surveyor and a grid for examination or check of the collected questionnaires].
- Develop Data Entry Frame [with special attention to entering reliable data and to the computerized processing of data in order to facilitate the set-up of the labor force profile indicators]. This database will be concise and set-up for the purpose of the analysis of the study data; it will be designed using MS Excel as a user-friendly program, which is convertible to any other database such as SPSS or STATA. MOL and SABEQ will be consulted during the development of the Data Entry Frame.
- At this stage of the project, the Consultant is ready to prepare the overall organization of the fieldwork; work schedule, timing, survey personnel, list of sample locations, sharing of tasks among the team, methods to process and analyze data collected. [The sample being mapped for Mafrq governorate].
- Shabakat Al Ordon shall be responsible for recruitment and management of the surveyors and data entry staff. The consultant and Shabakat Al Ordon shall agree on a realistic fieldwork plan and map. The required resources to perform the fieldwork are determined during this stage. All documents and tools will be prepared in Arabic, then when approved they will be translated into English. It is estimated that twenty Surveyors (males and females) in addition to four data entry staff will be required. It is recommended to recruit surveyors from the residents of Mafrq governorate to overcome cultural and social barriers.

- In coordination with Shabakat Al Ordon Jordan, a 3-day training program for the Surveyors to be held to introduce the survey tool and present the work plan. The Surveyors will have the chance to learn the skills and competencies useful for labor studies. Shabakat Al Ordon will select the candidates/interns for the training session, and shall attend and supervise the session as part of its role. A first one-day training session will be held for the Surveyors to familiarize them with the survey methodology, instruments already prepared (questionnaires, interviews, guides etc) and also as to methods for interviewing and collecting data and all related field work to be accomplished (organization, identification of sample members, mapping of skills, attitudes, interviewees' approach etc). A second 2-day training session to be held for the Surveyors to practice the use of survey tools, and demonstrate possible scenarios and situations that may possibly be encountered during the fieldwork, and how to deal with each case. Surveyors will learn how to make contact with target segment, how to ask questions in a clear manner, how to receive answers and how to record the answers. They will also learn the social skills for interacting with the community, through giving them a further background about the governorates and districts in terms of the local community norms, traditions, beliefs, surrounding environment, dominant culture, accent and behaviours. The training sessions shall be arranged and held at a suitable facility in Mafraq. Shabakat Al Ordon Jordan shall handle all requirements and services.
- MDC and Development Areas Commission in coordination with Shabakat Al Ordon shall carry out a media campaign to introduce the survey to Mafraq citizens and obtain their acceptance by preparing them psychologically for the interviews.
- Shabakat Al Ordon shall launch and monitor the field survey according to the work plan, and regularly inform Consultants of the latest developments. According to the proposed sample and plans, surveyors will identify the target segment to meet. Before launching the field work itself, all final documents (questionnaires, interview guides etc) will be reproduced in as many copies as needed for each of the surveyors. It is estimated that the fieldwork will take two weeks in Mafraq, to collect the questionnaires from the sample members. Approximately five to seven questionnaires shall be collected each day by each Surveyor, under observation and supported by three field Supervisors. The average number of questionnaires collected daily is 75. In case some Surveyors fail to achieve this daily target number of questionnaires, additional Surveyors will be called on to support the field team and adhere to the timeframe of the survey. During the survey, the team will work in pairs in each sub-district in order to interview male and female sample members.
- During the Fieldwork, Surveyors shall have open communication channels with field Supervisors to give feedback about the progress of the survey process. Field Supervisors shall keep the Survey Manager at Shabakat Al Ordon posted of the latest developments in the work. The survey manager will be instructed to intervene in case of any incident or situation that might delay the schedule of the survey or affect the quality of collected data. A daily verbal report will be communicated to the Survey Manager, and a weekly progress report shall be produced to ensure adherence to the plans. The weekly progress report shall be available for SABEQ and Consultant to review.
- At the end of the workday, the field supervisors to review the collected questionnaires in order to inspect the quality of the data shall spend an adequate time- period. A quality control of will be systematically undertaken of all the questionnaires by Shabakat Al Ordon. In case there is an indicator of sub-standard quality, a briefing session shall be held for the Supervisors and Surveyors to provide a solution that ensures high quality of questionnaires. In addition, quality control will take place before data entry on sample of the received questionnaires by consultants.
- Shabakat Al Ordon shall complete the data collection and entry in the database designed by Consultants. Once questionnaires are reviewed and their quality is accepted, they will be transmitted to the data entry staff, managed by the Statistician from Shabakat Al Ordon. They will enter and process the data and information collected. [The data entry process will take place simultaneously to the field survey, using Excel software]. The developed Data Entry Frame will have unique features such as validation rules and skipping patterns, to minimize human error during data entry.

3. Analysis and Reporting

- Examination of the entered data, performance correction and cleaning if required by Consultant, the entered data should then be "cleaned" and verified. Data entry staff shall review the received questionnaires on daily basis against errors, mistakes and incomplete or missing information. Credibility of questionnaires will be checked by selecting a sample of the questionnaires and calling respondents to thank them for participation in the survey. Furthermore, a sample from the questionnaires will be crosschecked with the entered data to ensure validity. After data processing, the database will be ready to be integrated with MOL labor profile database.
- Statistical analysis of the data to yield useful indicators about the Labor Force Supply in Mafraq. The consultants will finalize data analysis from the data collected in order to generate the labor profile indicators/ criteria as selected at the starting point of the project. In particular, they will take into account results obtained in terms of quantitative and qualitative assessment of the labor supply profile through the selected indicators. They will have to determine to which extent the collected data is relevant to and compliant with the survey objectives. The analysis will show the available work force (unemployed, job seekers) in terms of number, geographic distribution, education level, skills, experience, attitude towards jobs, willingness to work in the private sector, preferred work environment, minimum acceptable salary, expected benefits and other indicators.
- Development of labor force supply profile of Mafraq, including tables and charts showing the results of the survey analysis. The Labor Profile will be produced in the form of report and presentations.
- Submitting the draft reports of Labor Force Supply Profile to SABEQ and the client for review and comments, after making the necessary amendments, the final reports will be approved.
- Development of a Toolkit and Guidelines for the use of the Survey Tool and Methodology in other governorates and for updating the Labor Supply Profile in the National Database by MOL.

A8. ACTION PLAN AND TIMEFRAME

A. Labor Force Demand Study

The Labor Demand Study is planned to be conducted during the period October 2008 – February 2009. The detailed timeframe following.

Table 12: Labor Force Demand Study Timeframe

Table 12 Labor Demand Study - Timeframe						
Stage	Oct. 2008	Nov. 2008	Dec. 2008	Jan. 2009	Feb. 2009	Mar. 2009
Prepare for the labor demand study						
Conduct interviews with companies						
Follow up on the companies to complete questionnaires						
Review and analyze questionnaires						
Classify labor demand into categories						
Prepare draft report						
Discuss the draft report						
Prepare final report						

B. Labor Force Supply Study

The Labor Supply Study is planned to be conducted during a period Nov. 2008 – April 2009. The scope of the study shall cover Mafrq governorate for the current time. The timeframe following.

Table 13: Labor Force Supply Study Timeframe

Table 13 Labor Supply Study – Timeframe						
Stage	Jan. 2009	Feb. 2009	Mar. 2009	Apr. 2009	May. 2009	Jun. 2009
Design and preparations						
Conducting field work						
Analysis and reporting						

A more detailed timeframe for the field survey is included in the field plan in appendix (5)

A9. DELIVERABLES

A. Labor Force Demand Study

- General Labor Demand Survey Tool
- Sector-Specific Labor Demand Research Tool for five sectors
- Progress review meetings with SABEQ and MDC
- Draft report
- Final report including the quantitative and qualitative labor demand breakdown of KHBTDA in Mafrq
- Final report including quantitative and qualitative labor demand breakdown of IDA in Irbid

B. Labor Force Supply Study

- Labor supply profile of Irbid and Mafrq (based on available data and studies)
- Survey tool, design and fieldwork plan
- Surveyors training material and sessions

Labor force supply profile of Irbid and Mafrq (based on the survey results) containing:

(i.) Employed force profile, [which may contain – but not limited to –] the following criteria:

- Family characteristics
- Education level
- Education specialization
- Age
- Sex
- Skills
- Current occupation
- Previous occupation
- Experience period
- Actual weekly hours of work
- Wanting another or additional work
- Willingness to work in the private sector
- Incentives required to work in the private sector
- Wages and salaries (income)
- Marital status
- Employment status : employee, employer, self-employed, unpaid family worker, unpaid worker
- Work environment

- Economic activity
- Location (rural\urban, district, sub district and so on and so forth)

(ii.) Unemployed force profile, which may contain – but not limited to – the following criteria:

- Family characteristics
 - Education level
 - Education specialization
 - Age
 - Sex
 - Skills
 - Previous occupation (if applicable)
 - Willingness of unemployed people to work in the private sector
 - Incentives required to work in the private sector
 - Previous wages , salaries /income (if applicable)
 - Marital status
 - Previous employment status (if applicable) : employee, employer, self-employed, unpaid family worker, unpaid worker
 - Previous work environment (if applicable)
 - Previous economic activity (if applicable)
 - Previous work status
 - Current job applications (public institutions, private companies etc)
 - Duration of unemployment
 - Method of seeking work
 - Location (rural\urban, district, sub district, and so on and so forth)
- Draft and final report of the labor force supply profile of Irbid and Mafraq containing:
 - a) Executive summary
 - b) Introduction
 - c) Study objective
 - d) Scope of work
 - e) Methodology
 - f) Main findings
 - g) Analysis results
 - h) Conclusions and recommendations
 - i) Appendices
 - Labor force supply toolkit and guidelines.

B. LABOR FORCE DEMAND STUDY IN MAFRAQ

EXECUTIVE SUMMARY

A research of the labor demand study (LDS) was carried out for Mafrq as part of the labor force profile. The methodology of this research, concentrated on collecting labor and employee recruitment data from potential investment companies in the KHBTDA, using a specifically designed questionnaire tool. Ten companies were identified as potential investors, and the survey successfully managed to collect information for the labor demand profile from six companies. The scope of the LDS covered all potential companies, as there are few of them at this stage.

The analysis of the LDS concentrated on the quantity and quality of the required labor in terms of positions, skills, attributes, benefits, salaries and other factors. Due to the limited number of the target segment (companies), detailed research and analysis were carried out to describe the aspects of the labor demand profile in Mafrq based on the limited data available.

A total of 546 job opportunities are expected to be created in KHBTDA within the first year of operations of the six companies surveyed. On average, about 90 job opportunities could be created for each new company in KHBTDA.

B1. INTRODUCTION

Policy makers in the public sector are often faced with requests for support of investment projects and incentive schemes. Frequently, such requests are accompanied by economic evaluation or require economic impact analysis of some sort. Economic impact assessment of investment projects can be undertaken at various levels. At one level, decision makers are interested in the employment potential of the investment project, that is the ability of the project to absorb the local workforce. Taking a broader view, the challenge is to assess the impact of the proposed investment within the existing labor market in terms of reducing unemployment.

Often, a rather wild statement can be found in the media, arguing for example, that one job is created for a certain sum of money invested. Although such statements are appealing to the general public, decision makers need to go beyond these aggregate effects and extend the analysis to a more disaggregated level. For example, what will the effects be on the different economic industries? Will these jobs be created for highly skilled or unskilled labor?

Although commonly reported labor-related economic indicators, such as the unemployment rate, the level of employment, and new job creation, have been used to measure and track the local economy and trends in labor force participation, they often do not have direct utility for planning workforce development. The Labor Demand Survey (LDS) provides both an in-depth look into the current estimation of job vacancies of a particular sector or industry, within any given geographical area. The information can be used to direct the planning and allocation of technical and vocational education and training (TVET) resources to better prepare the local workforce to meet existing local demand in the different industries.

The Labor Demand Survey concentrates on the company and sector/industry in terms of establishment plan, departments, production capacity, human resources and employment trends. Secondly, the Labor Demand Survey provides an estimate of job vacancies. In addition, the survey also makes available focused information about reported occupations, including necessary skills, work environment, education, desired years of experience, required/desired personal attributes and recruitment methods.

The Labor Demand Survey is a useful tool to measure the shortage in labor market, which occurs when demand exceeds supply. A labor shortage occurs when jobs remain vacant, as there are insufficient numbers of workers willing to work at the offered wage or salary. Usually, we refer to an imbalance in numbers as labor shortage or workers gap, and to an imbalance of skills and quality as the skills gap.

The King Hussein Bin Talal Development Area (KHBTDA) in Mafrq governorate is a new kind of investment destination that has already started to attract interested local and international investors. The two most important aspects that are vital to the investment are infrastructure and labor force. Mafrq Development Corporation (MDC) is the master developer of KHBTDA, and one of its mandates is to advise investors regarding the availability and relevance of the local workforce viz a viz the needs of the investors.,

SABEQ has an overall goal of expanding jobs for Jordanians and achieving economic growth through expanding the private sector. MDC, in cooperation with SABEQ, is fulfilling their mission by producing the labor force demand profile.

B2. MAIN FINDINGS

Following the methodology described in section (A) of this report, consultants obtained and reviewed sources of data and information (appendix 6: list of references, appendix 7: list of companies) and then developed the labor demand survey tool (appendix 1). Consultants implemented the survey according to the schedule (appendix 8: meetings schedule) within the timeframe as in section (A) of the report. The main findings of the labor demand survey were:

1. Five versions of the labor force demand questionnaire were developed during the project, as a response to the expected sectors of investment in KHBTDA. The main design of the questionnaires is constant, with minor differences related to each sector in terms of operations and departments.
2. Eight companies were contacted as recorded in the schedule, but only six companies cooperated and completed the questionnaire form. The responding companies include:
 - a) MESC Fujikura
 - b) Al Hamad Contracting
 - c) Asian Petroleum
 - d) Munir Sukhtian
 - e) Aramex
 - f) Jordan Bahrain Paper Industries

The remaining companies did not participate nor respond to the survey in spite of numerous reminders and follow up calls over the duration of the survey.

3. All responding companies took a significant period of time to complete the questionnaire due to:
 - a) Unavailability for the interview, and substantial workloads of key people.
 - b) Questionnaire length and level of detail required.
4. Some questions remained unanswered due to their sensitivity (e.g. salaries) or difficulty to estimate (e.g. required number of labor for the next five years). In particular, it was difficult for companies to predict the human resources plan (staffing projections for five years) at this stage.
5. The total number of job opportunities that are expected to be created is **546 jobs**.

B3. LABOR FORCE DEMAND PROFILE

1. The responding 6 companies were divided as follows:

Table 14: Responding Companies in Mafrq KHBTDA

Table 14 Responding Companies	
Sector	Number of companies
Logistics and warehousing	2
Other manufactured products	4

Only one of the companies is fully-established and operational, while the others are still under establishment or in negotiations with MDC.

2. The maximum and expected production capacity of the companies varied according to the sector and nature of the industry. Most of the companies will operate with 50% of their production capacity during the first year of operations.
3. The total number of expected job opportunities for all companies combined is 546, distributed across the main departments as follows:

Table 15: Expected Job Opportunities in KHBTDA

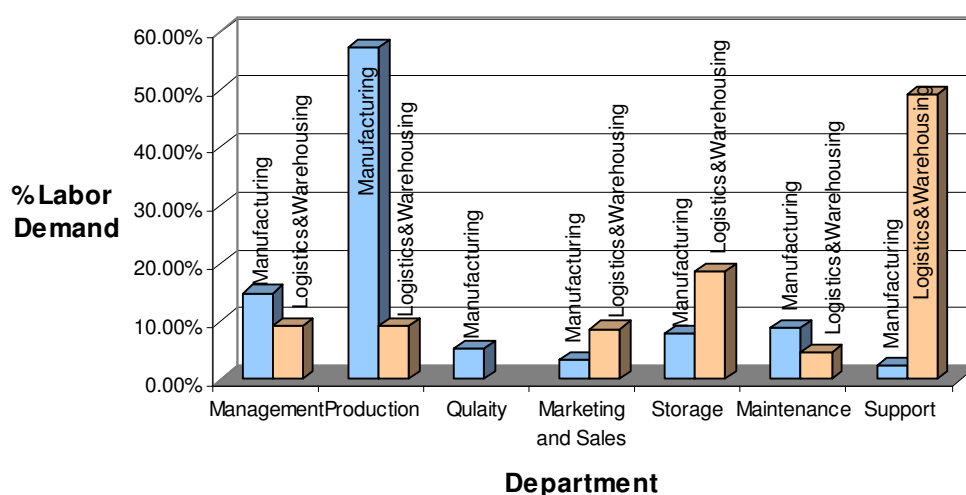
Table 15 Expected Job Opportunities in KHBTDA by Department						
Department	Number of Expected Job Opportunities Generated by Companies					
	MESC Fujikura	Asian Petroleum	Munir Sukhtian	Aramex	Al Hamad Contracting	Jordan Bahrian
Management	29	7	11	3	9	14
Production	86	23	12	2	41	77
Quality	10	2	0	0	3	6
Marketing and Sales	4	1	13	0	5	3
Storage	19	3	18	10	5	4
Maintenance	20	2	7	0	5	8
Support	0	0	66	8	4	6
Total	168	38	127	23	72	118

Companies differ in their need for labor in the main departments and functions, depending on the sector and nature of industry. A comparison between potential manufacturing (industrial) companies and logistics and warehousing (service) companies in KHBTDA reveals the following results:

Table 16: Labor Demand According to Sector

Table 16 Labor Demand Comparison between Manufacturing sector and Logistics and Warehousing						
Department	Manufacturing Companies = 4 Total Labor = 396			Logistics and Warehousing = 2 Total Labor = 150		
	Average	% of total	Job titles	Average	% of total	Job titles
Management	14.75	14.9%	13	7	9.3%	9
Production	56.75	57.3%	34	7	9.3%	3
Quality	5.25	5.3%	5			
Marketing and Sales	3.25	3.3%	3	6.5	8.7%	3
Storage	7.75	7.8%	6	14	18.7%	3
Maintenance	8.75	8.8%	7	3.5	4.7%	2
Support	2.5	2.5%	5	37	49.3%	3
Total	99	100%	73	75	100%	23

Figure1: Labor Demand Comparison among main Departments



Result:

Approximately 15% of labor demand by manufacturing companies is for management department positions, while only 9% of the labor demand by logistics and warehousing companies is for management department positions.

- The demand of certain positions in each department also varied depending on the sector and nature of the industry. There are also some differences among companies regarding the job title for the same position. The labor demand according to department and positions is illustrated in the following tables:

Table 17: Expected Job Opportunities in the Management Department

Table 17							
Expected Job Opportunities (by position) in the Management Department							
Position	Number of Expected Job Opportunities in Management Department						
	MESC Fujikura	Asian Petroleum	Munir Sukhtian	Aramex	Al Hamad Contracting	Jordan Bahrian	Total
Board of Directors	7	3	0	0	1	5	16
Executive Management	8	1			1		10
General Manager			1			1	2
Asst. General Manager			1				1
Administration			1		1	1	3
Senior Operations Supervisor				1			1
Secretariat	1				3	2	6
Data Entry Staff				2			2
Human Resources	2		1		1		4
Personnel officer						1	1
Public Relations		1			1		2
Financial Management	4		1		1		6
Accounting		2	5			1	8
Accounting Manager			1				1
Receptionist/Tel. operator						1	1
Planning officer	2						2
Purchasing	5					2	7
Total	29	7	11	3	9	14	73

Table 18: Expected Job Opportunities in the Production Department

Table 18 Expected Job Opportunities (by position) in the Production Department							
Position	Number of Expected Job Opportunities in Production Department						
	MESC Fujikura	Asian Petroleum	Munir Sukhtian	Aramex	Al Hamad Contracting	Jordan Bahrian	Total
Initial reparations worker		3					3
Processing worker		6					6
Finishing worker		9			25		34
Technical Manager			1				1
Technical Officer			11				11
Operations supervisor				2			2
Packaging worker					6		6
Production Manager						1	1
Production clerk						1	1
Plate Maker/mounter						3	3
Die cut Maker/Sample Box Maker						2	2
Artist						2	2
Single Facer Operator						2	2
Assistant Operator						2	2
Double Backer						2	2
Auto Slitter scorer/cut off supervisor						2	2
Down stacker						4	4
Labor/worker						16	16
Boiler operator / glue mixer						2	2
Grab lift operator						2	2
Forklift operator						4	4
Bailing press operator						2	2
Pallet maker						1	1
Waste collector						1	1
Operator						4	4
Manual stitchers						8	8
Auto stitchers						4	4
Strapping Machine operator						2	2
Creaser						6	6
ECC. slotter						2	2
Production Planner						1	1
Assistant Planner						1	1
Other: Production staff	86	5	12	2	10		101
Total	86	23	12	2	41	77	241

Table 19: Expected Job Opportunities in the Quality Control Department

Table 19 Expected Job Opportunities (by position) in the Quality Control Department							
Position	Number of Expected Job Opportunities in Quality Department						
	MESC Fujikura	Asian Petroleum	Munir Sukhtian	Aramex	Al Hamad Contracting	Jordan Bahrian	Total
Testing/Quality Control inspector		2				4	6
QC Manager						1	1
Production Quality Control officer					2		2
Ink Mixer						1	1
Quality Assurance officer	10				1		11
Total	10	2	0	0	3	6	21

Table 20: Expected Job Opportunities in the Marketing and Sales Department

Table 20 Expected Job Opportunities (by position) in the Marketing and Sales Department							
Position	Number of Expected Job Opportunities in Marketing and Sales Department						
	MESC Fujikura	Asian Petroleum	Munir Sukhtian	Aramex	Al Hamad Contracting	Jordan Bahrian	Total
Export Manager/officer		1			2		3
Sales Manager			1			1	2
Marketing Manager			1				1
Sales team/executives/ reps.	4		11		3	2	20
Total	4	1	13	0	5	3	26

Table 21: Expected Job Opportunities in the Warehousing and Storage Department

Table 21 Expected Job Opportunities (by position) in the Warehouse and Storage Department							
Position	Number of Expected Job Opportunities in Warehouse and Storage Department						
	MESC Fujikura	Asian Petroleum	Munir Sukhtian	Aramex	Al Hamad Contracting	Jordan Bahrian	Total
Raw materials store worker	3	1			1	1	6
Finished products store worker	15	1			2	1	19
Equipment and tools store worker		1					1
Rejected Products					2		2
Warehouse Manager/Storekeeper			1				1
Stores worker (general)			7	10			17
Store vehicles driver			10			2	12
Head of Stores Department	1						1
Total	19	3	18	10	5	4	59

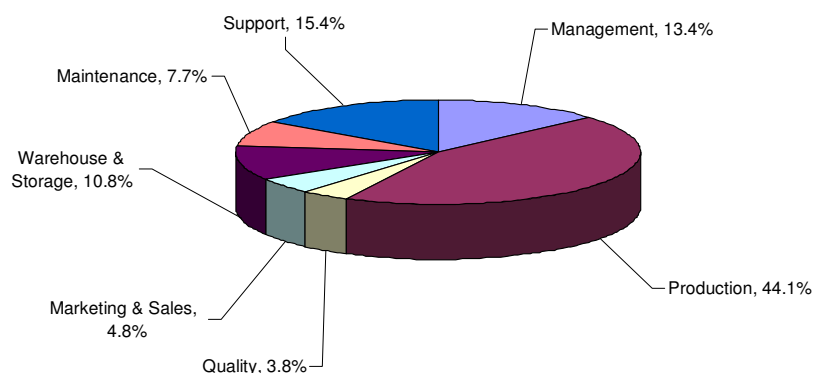
Table 22: Expected Job Opportunities in the Maintenance Department

Table 22 Expected Job Opportunities (by position) in the Maintenance Department							
Position	Number of Expected Job Opportunities in Maintenance Department						
	MESC Fujikura	Asian Petroleum	Munir Sukhtian	Aramex	Al Hamad Contracting	Jordan Bahrian	Total
Maintenance Manager			1			1	2
Maintenance supervisor						1	1
Maintenance technician			6				6
Diesel Mechanic						1	1
Boiler Tender						1	1
Mechanical engineer/technician	12					2	14
Electrical engineer/technician	8					2	10
Other: Maintenance worker		2			5		7
Total	20	2	7	0	5	8	42

Table 23: Expected Job Opportunities in the Support Department

Table 23 Expected Job Opportunities (by position) in the Support Department							
Position	Number of Expected Job Opportunities in Support Department						
	MESC Fujikura	Asian Petroleum	Munir Sukhtian	Aramex	Al Hamad Contracting	Jordan Bahrian	Total
Emergency staff					3		3
Security Guard			10	6		4	20
Cleaning worker			4	2			6
Driver						1	1
Office Boy/Pantry						1	1
Other support staff			52		1		53
Total			66	8	4	6	84

Figure2: Labor Demand by Department



- In terms of labor demand profile, a number of criteria were used to define attributes of each position, depending on the sector and nature of company's activity. Based on these criteria, companies described the required capacities, capabilities, qualifications, traits and skills that should be available in their future labor. Most of the requirements were minimum or basic in this early stage of

companies' establishment, but will be more specific once the operations are launched. The labor profile (job description) of the different positions is summarized in the following tables:

Table 24: Characteristics of Labor Demand Profile

Table 24 Labor Demand Profile by Job Description Criteria (Work location and environment)							
Criteria	Percentage Labor						
Work Location	Production line	Office	Store	Laboratory	Office & Field	Outdoor / Field	
	67.9%	9.5%	9.2%	0.2%	1.5%	5.3%	
Work Environment	Comfortable	Fumes/ smoke	Noise	Vibrations	Warm	Cold	Other
	32.1%	3.7%	44.9%	0.9%	4.2%	12.6%	1.7%

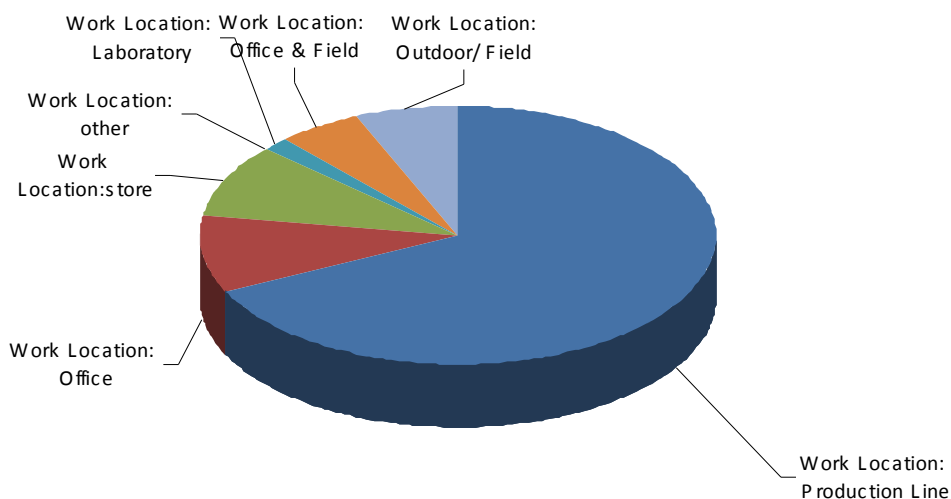


Figure3: Labor Demand according to Work Location

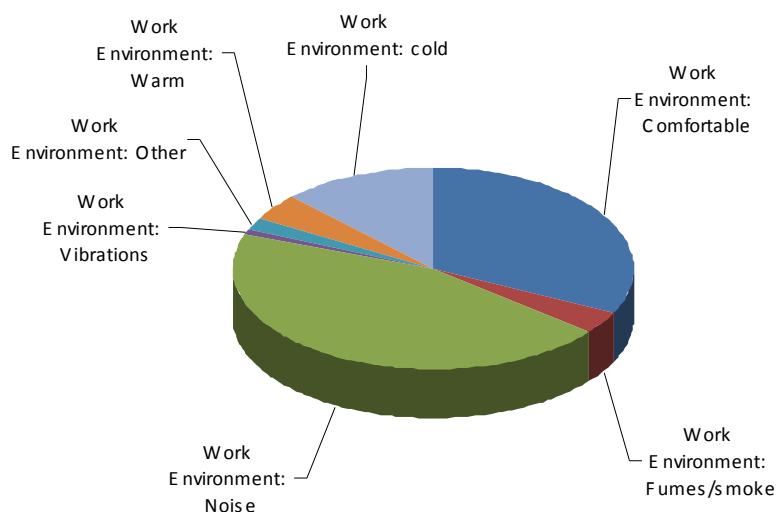


Figure4: Labor Demand according to Work Environment

Table 25: Characteristics of Labor Demand Profile

Table 25 Labor Demand Profile by Gender, Education Level and Experience							
Criteria	Percentage Labor						
Gender	Male	Female	Male/Female				
	96.2%	1.5%	2.3%				
Education Level	Literate	Basic/ Elementary	General Secondary	VTC	Training course	Diploma	BA / MBA
	17.5%	0.3%	24.8%	19.5%	3.7%	13.4%	20.8%
Experience (years)	none	>1	1-2	3-4	5-7	8-10	<10
	23.5%	17%	21.2%	18.6%	16.5%	0.9%	2.3%

Figure5: Labor Demand Profile by Education Level

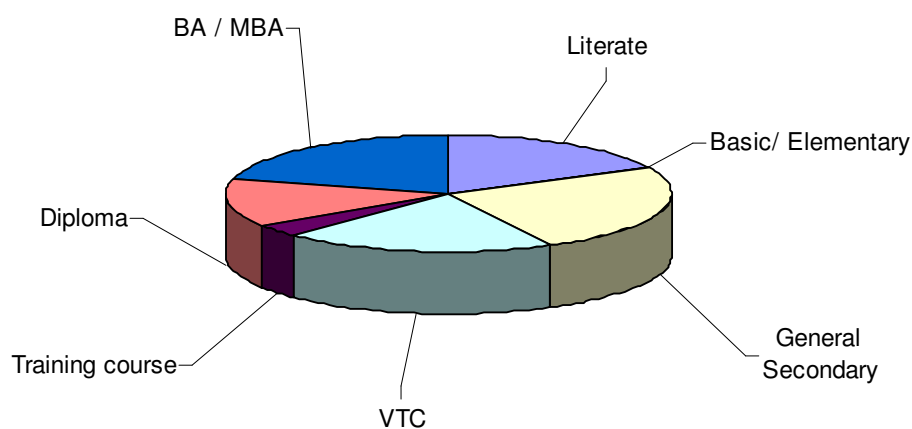
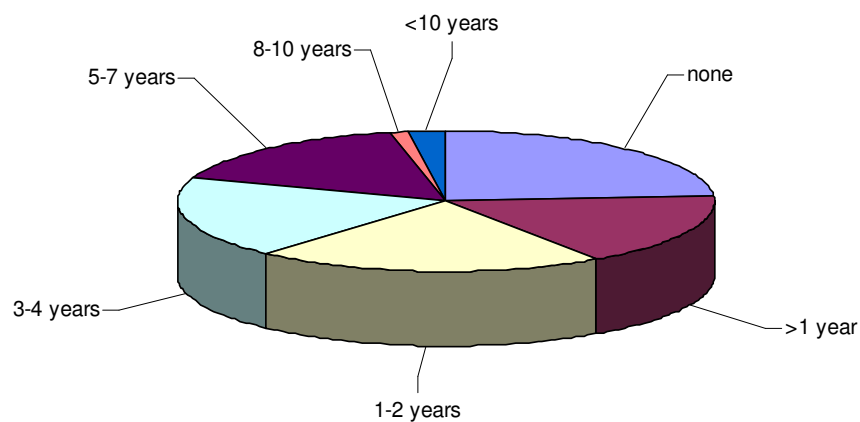


Figure6: Labor Demand Profile by Experience



6. The labor demand profile varied in terms of technical skills, but in general the logistics and warehousing sector focused on few technical skills (e.g. storekeeping, forklift driving, English language), while the manufacturing sector required more specific technical skills such as:
 - Production management and planning
 - Project management
 - Metal forming skills (fabricator, fitter, gas cutter, helper, CNC operator, shearing machine operator, plate binding, crane operator, blaster, painter, lathe operator).
 - Industry knowledge and experience.
7. The labor demand profile included certain personal traits or attributes that are important for the job regardless of the required technical skills. Most staff are expected to have one or two specific personal skills that would ensure the successful performance of their work tasks. The personal skills are relevant to the position, where higher positions require more advanced skills. The common personal skills required, as stated by the companies, are shown in the following table:

Table 26: Labor Demand Profile by Personal Skills

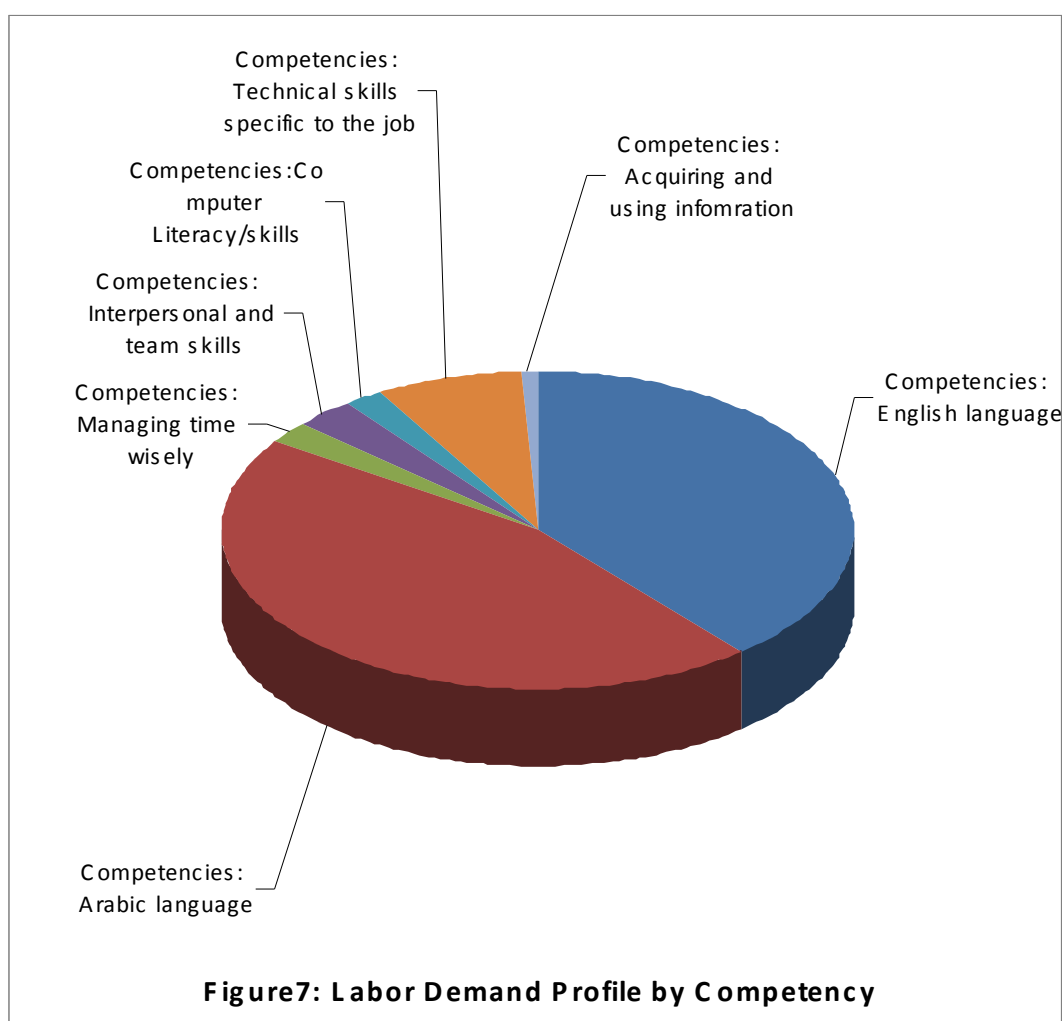
Table 26 Labor Demand Profile by Personal Skills	
Personal skill	Percentage of Labor
Leadership	0.7%
Decision Making	2.4%
Report Writing	1.1%
Critical Thinking	0.9%
Listening/Following instructions	2.6%
Work under pressure	36.6%
Problem solving	1.3%
Understanding charts and graphs	1.7%
Communicating clearly	0.9%
Ability to learn new skills	13.4%
Customer care	2.8%
Work ethics	7.3%
Supervisory skills	16.6%
Other skills	11.6%

Companies stated other personal skills including: loyalty, creativity, team spirit and team work, telephone conversation skills, time management skills, commitment and self-organization skills.

8. Another essential aspect of the labor demand profile is competency. There are a number of competencies related to each job that enable the employee to fulfill the job's tasks effectively, and retain the position for long time. KHBTD companies classified their labor demand according to required competencies as follows:

Table 27: Labor Demand Profile by Competency

Table 27 Labor Demand Profile by Competency	
Competency	Percentage of Labor
English language	38.9%
Arabic language	45.5%
Managing time wisely	2.4%
Interpersonal and team skills	3%
Computer literacy/skills	2%
Technical skills specific to the job	7.5%
Acquiring and using information	0.8%



9. In order to recruit and retain labor, companies comply with the Jordanian labor law, and offer additional advantages, rights, privileges, benefits and incentives. The job description of the different positions usually includes these points. The labor demand profile can be described as follows (in relation to the procedures and offers of these companies):

Table 28: Labor Demand Profile According to Other Aspects

Table 28 Labor Profile by Labor Procedures, Rights and Benefits							
	Percentage of Labor						
Probation period (month)	3	6					
	93.3%	6.7%					
Benefits and incentives	Medical insurance	Transportation	Housing / Accommodation	Social security	Training	Commission	Other
	33.1%	21.6%	0.1%	41.8%	1.2%	1.2%	0.9%
Recruitment method	Employment agencies	Newspaper	Universities & colleges	Referral	Contractors	Internal Recruitment	Other
	8.4%	52.4%	0.6%	33.8%	2.2%	0.4%	2.2%

10. Some of the factors affecting the labor market include availability of a qualified candidate, particularly for senior positions. The availability can be measured by the difficulty and duration of recruitment process. In general, it is difficult to find and recruit qualified, experienced labor, especially in remote and rural areas of the country. The recruitment process takes longer, and at a higher cost when recruiting for an executive manager or director. The labor demand profile is characterized by the differences in the levels of recruitment difficulty as shown in the following table:

Table 29: Labor Demand Profile According to Availability

Table 29 Labor Demand Profile according to Availability of Workforce			
Position	Evaluation		
	Recruitment Difficulty	Recruitment Duration	Cost of Recruitment
Top Management	Great difficulty	More than 6 months	300 - 2000 JD
Administration	No difficulty	1 month	Less than 100 JD
Executive Assistants/Secretariat	Some difficulty	1 month	Less than 100 JD
Financial and Accounting	Some difficulty	2 months	300 - 500 JD
Production Management	Some difficulty	2 months	300 - 500 JD
Production staff and operators	No difficulty	1 month	Less than 100 JD
Quality Control/Assurance staff	Some difficulty	2 months	300 - 500 JD
Storekeeping staff	No difficulty	1 – 3 weeks	Less than 100 JD
Maintenance Management	Some difficulty	2 months	300 - 500 JD
Maintenance technicians	No difficulty	1 – 3 weeks	Less than 100 JD
Marketing and Sales Management	Some difficulty	1 month	300- 500 JD
Sales team/Representatives	No difficulty	1 -3 weeks	Less than 100 JD
Support staff	No difficulty	1- 3 weeks	Less than 100 JD

11. Labor Demand Profile was also assessed in terms of salary scale. Only three companies shared their expected salary scale during the survey. Companies consider their salary scales as confidential information. The estimated salary scale of the labor demand profile is illustrated in the following table:

Table 30: Labor Demand Profile According to Salary Scale

Table 30 Labor Demand Profile according to Estimated Salary Scale	
Position	Salary Range (JD)
Top Management	1000 – 3500
Administration	500 – 1200
Executive Assistants/Secretariat	500 – 750
Financial and Accounting	600 – 1500
Production Management	750 – 1000
Production staff and operators	250 – 500
Quality Control/Assurance staff	350 – 600
Storekeeping staff	150 – 300
Maintenance Management	750 – 1000
Maintenance technicians	300 – 600
Marketing and Sales Management	800 – 1250
Sales team/Representatives	300 – 600
Support staff	150 – 250

Important Note: The labor demand profile described above was accumulated by collecting the inputs of KHBTDA potential companies at the time of the survey; therefore, it is subject to modifications and changes upon the actual realization of the projects.

B4. CONCLUSIONS

- 1) Manufacturing companies are labor intensive and usually employ a high number of staff, while warehousing and logistics have less employees and depend only on a few key staff. This is due to the need for technical staff with various experiences and skills in the manufacturing companies.
- 2) The production department has the highest labor demand in the manufacturing sector, while the support department has the highest labor demand in the logistics and warehousing sector. This is due to the numerous processes existing in the production department of the manufacturing sector, while the main function in the logistics and warehousing is support.
- 3) Most of the expected job opportunities will be on the production line, characterized by noisy a work environment and tough work conditions. On the other hand, management positions are associated with a comfortable work environment.
- 4) In general, males dominate the labor demand in the companies (more than 96%), with limited opportunity for females. Females are expected to work in administrative and clerical positions.
- 5) The labor demand profile is balanced in terms of the required educational qualifications. Even literate and general secondary certificate holders have good opportunities according to the labor demand profile of KHBTDA. Only the basic and elementary level workforce is in low demand.
- 6) The labor demand profile of KHBTDA concentrates on the low to medium experience workforce (1 – 7 years), with an acceptable balance. Even non-experienced workers are expected to find job opportunities in the development area. Positions requiring highly-experienced staff (8 – more than 10 years) are limited.
- 7) In addition to the basic technical skills, the labor demand profile also showed a need for a workforce with specific personal skills, notably, "working under pressure", "supervisory skills" and "ability to learn new skills".
- 8) The most highly demanded competencies are English and Arabic languages in KHBTDA.
- 9) Companies of KHBTDA offer labor procedures and rights in compliance with the law, and provide a probation period of 3 months. Social security, medical insurance and transportation are widely provided as part of the benefits and incentives given to the workforce.

- 10) Companies use many methods to recruit and fulfill their labor demand. The most common techniques for recruitment are newspaper advertisements and referrals. On the other hand, companies are expected to face great difficulty when recruiting a general manager from Mafrq. Most of the labor is expected to be recruited within 1 to 3 months, and the recruitment process may cost up to 500 JD per employee.
- 11) Salary scale of labor demand is considered above average for most of the positions and jobs, therefore, it is expected to attract the appropriate workforce from within Mafrq.

B5. RECOMMENDATIONS

- 1) MDC may decide to focus on attracting manufacturing companies to KHBTD, due to their contribution to employment of all levels of labor. The labor demand profile of KHBTD tends to be more industry-oriented, with a need for vocational skills.
- 2) The labor demand profile encourages the introduction of production and industrial vocational training to serve the need of the production and maintenance departments in the manufacturing companies.
- 3) Strict occupational health and safety measures should be applied to the companies in KHBTD, due to the fact that most of the expected job opportunities will be in the production department, under difficult work environment conditions. The workforce should be educated in advance about issues related to work safety precautions.
- 4) Special attention should be paid to inclusion of more females in the workforce at KHBTD, by providing incentives to companies to hire females, and conduct awareness activities to overcome the cultural barriers regarding female employment in Mafrq.
- 5) The limiting factor in matching the labor demand profile of KHBTD to the workforce in Mafrq will be the skills level rather than the education level, since balanced proportions of all educational backgrounds are required by the investing companies. The same applies for years of experience.
- 6) It is highly recommended to upgrade the personal skills of the workforce in Mafrq to match the labor demand profile of KHBTD. This may take the form of several initiatives carried out by national and local institutions such as universities, community colleges, civil society organizations and private institutes. There is an evident need to enhance the language competencies among Mafrq's workforce.
- 7) The minimum social and legal requirements for labor are committed by KHBTD companies. MDC may intervene in order to improve the work conditions and the livelihood of workers.
- 8) MDC could play a major role in recruitment of a workforce according to the labor demand profile, by keeping a database of unemployed people and job seekers. This in turn could be provided to the investing companies, with a required commitment to priority employment.
- 9) The suggested salary scale by the KHBTD companies is considered suitable and feasible for Jordanian workforce, therefore, MDC and other organizations should promote this aspect when assisting companies in fulfilling their labor demand in the labor market of Mafrq.

C. LABOR FORCE SUPPLY STUDY IN Mafrq

EXECUTIVE SUMMARY

The objective of the Labor Force Supply Study in Mafrq is to identify the workforce profile then match it to the labor demand of potential investors of KHBTD. The methodology of conducting the Labor Force Supply Study consisted of collecting personal and background data about the target population in Mafrq by means of a pre-designed questionnaire in order to build a comprehensive profile of the workforce in Mafrq. The scope of the Labor Force Supply Study covered a stratified sample of Mafrq's population with the size of 836 persons, plus an additional group to confirm results.

The indicators resulting from the analysis of the data showed that there is potential for employing the labor force within the KHBTD, taking into consideration that most of the workforce is to be trained, upgraded and prepared for employment in companies.

Secondary data collected from DOS (2008) indicates that the workforce of Mafrq accounts for 35.9% of the total population (58,366 persons). In Mafrq's population, 60.3% of the males are classified as workforce, while only 11% of the females were included in the workforce group.

Based on the definitions used for the purpose of this study, the employed workforce consisted of 30.9% of the study sample. On the other hand, the actual unemployed workforce accounted for 40.3%. The male proportion of the employed workforce was 42.2%, while employed female workforce was 19.8%.

Regarding the education level of the unemployed, only 6.8% of the secondary stage graduates hold vocational secondary certificate, which indicates deficiency in this educational qualification among Mafrq's workforce. About 16.5% of the unemployed workforce holds the first university degree in various specializations, mostly in education, teaching, computer and literature. Only 4.2% of the unemployed have intermediate or community college technical diploma. In terms of vocational skills, only 3.8% of the unemployed workforce has graduated from vocational training centers or institutes.

In terms of gained skills through training, the results of the survey show that Mafrq's unemployed workforce possess more administrative, commercial and computer skills than technical or vocational skills.

Most of the employed workforce, work in the public sector, while only 35.2% work in the private sector.

The dominant employment status among employed workforce are paid employees where 85% of the employed persons are full-time employees receive regular salaries on the payroll of public and private institutions.

71.3% of the unemployed confirmed that they are looking for jobs, in addition to 44.6% of the employed who were new job seekers as survey results indicate.

About 23% of the sample in Mafrq held one or more previous jobs, and more than 70% of the employed are still holding their first job. Most of the workforce who left their jobs agreed that it was due to financial insufficiency (i.e. limited income or salary).

A number of conclusions and suggested recommendations were reached. Although the level of education and specialization of workforce are minimally relevant to the expected jobs, the salary scales and some of the work conditions available in Mafrq are still unattractive for the workforce.

The study sample suffers from inadequate vocational and business skills (e.g. communication, time management, reporting), which needs immediate attention. The experience and skills of study sample are limited in most cases; however, the study sample members prefer top and middle management positions.

The main recommendation for MDC is to facilitate and support the upgrading of the workforce based on the specific needs of the expected employers in Mafrq, through coordination with training providers in order to help in securing appropriate jobs for the unemployed, focusing on the frontline (workers) and lower management (e.g. foreman, operator, workers' supervisor) staff required by investors of KHBTD.

C1. INTRODUCTION

Unemployment, with its economic and social implications, is one of the most pressing problems facing Jordanian policy makers. The unemployment rate in Jordan fluctuated around 13% to 15% over the last five years. Unemployment among males estimated slightly at lower rate than the national average, while for females it has been much higher.

Facts about the workforce situation in Jordan were seen by conducting regular employment and unemployment surveys all over the Kingdom. Many factors influence the employment of people in the labor market such as preferred job type and location, education level, practical skills, acceptable minimum wage, fringe benefits, and possible career path.

The Labor Force Supply Survey is a large household survey designed to give information about the number of people with jobs, the details of these jobs, the job-search activities of those without work, and so on. The

results are used by the government, by research entities, by universities and international organizations for different purposes. The purpose of the survey is to provide the information needed to help the Government decide its economic (especially labor market) policy. The “labor market” covers all aspects of people’s work, including the education and training needed to equip them to work, the jobs themselves, job-search for those out of work, and income from work and benefits.

Since SABEQ has an overall goal of expanding jobs for Jordanians and achieving economic growth by enhancing the private sector, it supported MDC to carry out the Labor Force Supply Survey in cooperation with Dajani Consulting and Shabakat Al Ordon to produce the labor supply profile. In an earlier stage, the labor demand profile of KHBTDA was prepared. The rationale behind conducting both profiles is to match labor supply with demand, and detect gaps in the labor market. In the main governorates and cities, gaps are usually small and insignificant. In remote and low populated governorates, the gaps are usually larger.

MDC will use the results of the Labor Force Supply Study to take action and create initiatives that would promote the recruitment of Mafrq's workforce by KHBTDA's investors. Actions may vary between developing specialized training programs to establishing a recruitment and job placement unit at MDC. Despite the planned intervention, MDC shall keep and update the labor supply database of workforce.

C2. LITERATURE REVIEW RESULTS

1. The official population estimate statistics published by DOS (2008) indicate that the total population in Mafrq is **275,000**, and the number of population over the age of 15 is **162,580**. The following tables (31 and 32) show the distribution of workforce according to economic participation and employment status:

Table 31: Economic Activity and Employment in Mafrq

Table 31 Distribution of Mafrq's population^(a) aged 15 and above by economically activity and employment status (DOS, 2008)					
	Workforce⁽¹⁾			Economically inactive⁽⁴⁾	Total %
	Employed⁽²⁾	Unemployed⁽³⁾	Total		
Males	53.7%	6.6%	60.3%	39.7%	100%
Females	7.9%	3.1%	11%	89%	100%
Total	31%	4.8%	35.9%	64.1%	100%

When applying the workforce percentages to the official statistics, the resulting numbers are as follows:

- Total Workforce: 58,366 (approximately 50,000 males and 8,366 females)
- Total employed: 50,400
- Total unemployed: 7,804

Table 32: Mafraq Workforce by Gender

Table 32 Mafraq Workforce divided according to Gender (DOS 2008)				
	Economically Active ⁽⁵⁾			Economically inactive ⁽⁴⁾
	Employed ⁽²⁾	Unemployed ⁽³⁾	Total	
Males	87.3%	68.6%	84.8%	31.3%
Females	12.7%	31.4%	15.2%	68.7%
Total	100%	100%	100%	100%

Notes:

(a) Study Population: People over the age of 15 who are economically active or inactive.

(1) Workforce: Economically active persons over the age of 15.

(2) Employed: People over the age of 15 who did some paid work in the reference week (whether as an employee, self-employed or own business) for the public or the private sector; those who had a job that they were temporarily away from (on holiday, for example); those on government-supported training and employment programs; and those doing unpaid family work. [for the purpose of this study, the reference period for employment was paid work for at least one month duration].

(3) Unemployed: The ILO's measure of unemployment refers to people without a job who were available to start work within the two weeks following their interview and those who either had looked for work in the four weeks prior to interview or were waiting to start a job they had already obtained.

(4) Economically Inactive: People who are neither employed nor unemployed on the ILO measure. This group includes all those who were looking after a home (homemakers) or retired (as well as those aged under 15). This category includes Student, Housemaker, Income recipient, Disabled, Others

(5) Economically Active: People over the age of 15 who are either employed or unemployed.

- The statistics of Civil Service Bureau (CSB) indicate interesting information about the workforce in Mafraq. CSB received 827 new applications from Mafraq in the year 2007. The number of the successful applicants (i.e. recruited in the civil service) was 177 (21.4% of the applicants). Table (33) below contains the percentages of the new applicants and their status by gender in Mafraq:

Table 33: Civil Service Applications in Mafraq by Gender

Table 33 Percentage of new applications for civil service and their status by gender in Mafraq (CSB 2007)									
Education qualification	Applicants			Rejected			Recruited		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
University degree	36.5%	63.5%	100.0%	88.9%	11.1%	100.0%	63.7%	36.3%	100.0%
Diploma degree	24.3%	75.7%	100.0%	100.0%	0.0%	100.0%	35.0%	65.0%	100.0%
Total	35.4%	64.6%	100.0%	89.5%	10.5%	100.0%	60.5%	39.5%	100.0%

Note: The applicants who are still on the "waiting list" for recruitment represent about 76.3% of the total applicants. 92.2% of them hold university degrees, while 7.8% of them hold community college diplomas.

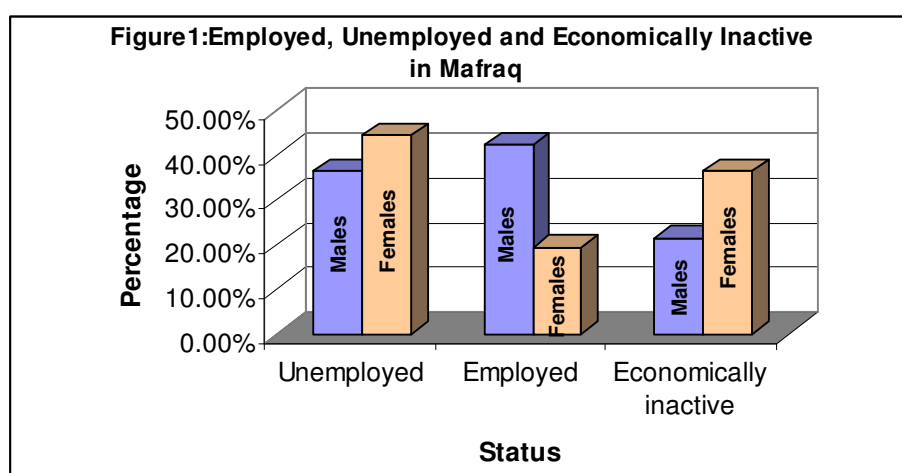
C3. FIELD WORK OBSERVATIONS

Following the methodology described in section (A) of this report, consultants carried out the design and preparation stage which resulted in the development of labor force supply survey tool (appendix 4), and then Shabakat Al Ordon conducted the survey stage according to the fieldwork plan (appendix 5). Consultants performed the analysis and reporting stage. During the fieldwork, the following remarks were observed:

- 1- The survey focused on the target segments, by covering households in different districts systematically. Many people refused to participate in the survey due to their fear of disclosing their personal information (particularly related to work and income), therefore, they were substituted with more cooperative people within the same sample conditions.
- 2- Respondents took a significant amount of time to complete the questionnaire due to the length and level of details required, along with their perception and understanding of questions. The duration of the interview ranged between 30 to 60 minutes.
- 3- Some questions remained unanswered by few respondents due to their sensitivity (e.g. salaries) or irrelevancy to the case.
- 4- The percentage of employed in the total sample was 30.9%. The percentage of unemployed in the total sample was 40.3%. The unemployed were determined as people who are currently without work but seeking a job, and available for work. The remaining percentages of the sample were economically inactive people.

Table 34: Employment and UNemployment in Mafrq Sample

Table 34 Employment and Unemployment in Mafrq's Sample								
Gender	Unemployed		Employed		Economically inactive		Total	
	Number	%	Number	%	Number	%	Number	%
Males	174	36.3%	202	42.2%	103	21.5%	479	100%
Females	210	44.3%	92	19.4%	172	36.3%	474	100%
Total	384	40.3%	294	30.9%	275	28.8%	953	100%



It is worth mentioning that the unemployed workforce (40.3%) as measured by this study includes a group of "economically inactive" persons (e.g. housewives, students, retired employees) who consider themselves unemployed because they stated that they were capable, ready and in need for work, in spite that they are slightly interested in seeking jobs. Subsequently, they were classified as unemployed workforce. In addition

to that, the "economically inactive" status is subject to change as a result of new factors (i.e. student graduates and starts looking for a job).

Moreover, the percentage of the unemployed is exceptionally higher than the average due to the design of the sample and the fieldwork, which was distributed amongst households, establishments and public locations in Mafrq.

Result:

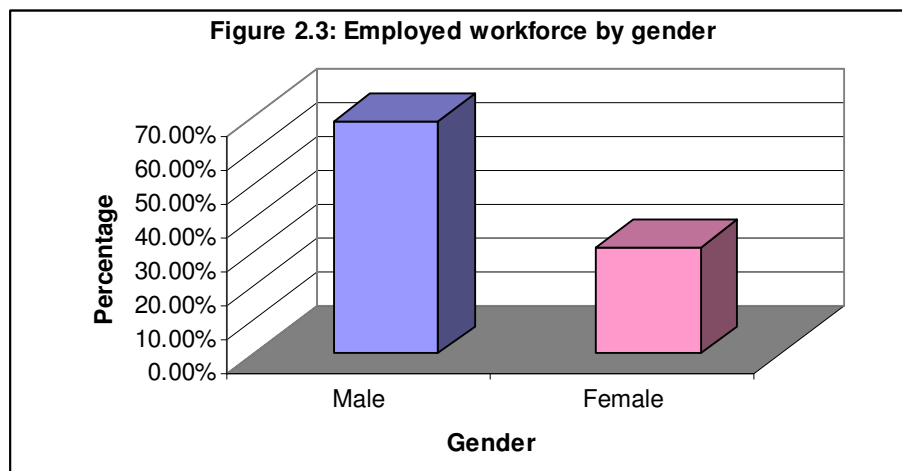
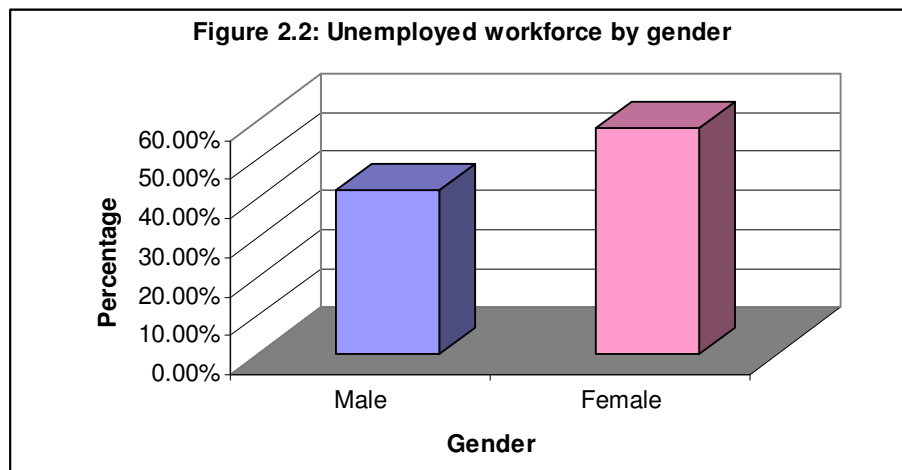
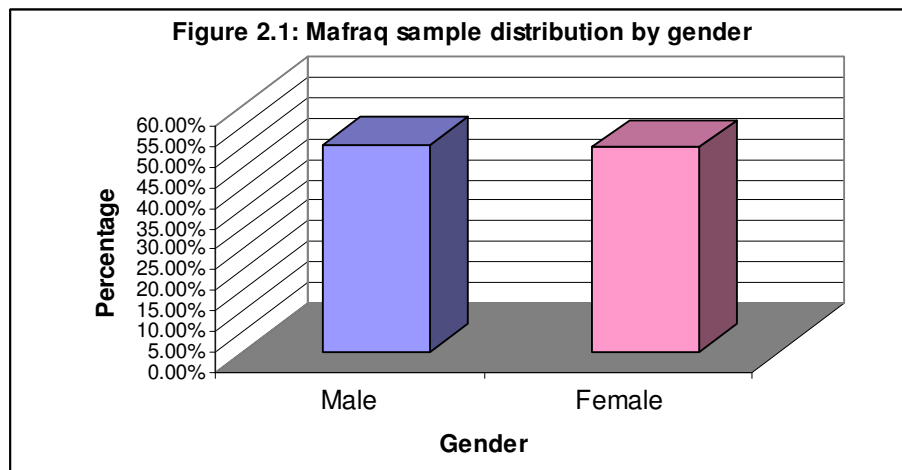
The total employed persons according to Mafrq sample is 30.9%, while the total unemployed persons reached 40.3%. The unemployed include a segment of the "economically inactive" that showed interest and ability to work.

C 4. LABOR FORCE SUPPLY PROFILE

1. Two versions of the questionnaire were used during the survey; one for the employed and the other for the unemployed. Both versions contained similar questions with minor differences. The beginning of the questionnaire asks about the personal information (name, gender, date of birth, marital status, family members). The collected information included the national number and the full address in order to trace and contact the person in case he/she were candidates for a job opportunity created through the database of MOL or MDC.
2. The basic characteristics of the sample are shown in table (35):

Table 35: Basic Charactersitics of Mafrq Sample

Table 35						
Basic Characteristics of the Mafrq sample (gender and age)						
Gender	Study sample		Unemployed and economically inactive		Employed	
	Number	%	Number	%	Number	%
Male	479	50.3%	277	42.0%	202	68.7%
Female	474	49.7%	382	58.0%	92	31.3%
Total	953	100%	659	100.0%	294	100.0%
Age category						
15 – 19 year	219	23%	210	31.9%	9	3.1%
20 – 24 year	268	28.1%	219	33.2%	49	16.7%
25 – 29 years	161	16.9%	95	14.4%	66	22.4%
30 – 34 years	92	9.7%	34	5.2%	58	19.7%
35 -39 years	76	8%	35	5.3%	41	13.9%
40 – 44 years	67	7%	23	3.5%	44	15.0%
45 – 49 years	22	2.3%	10	1.5%	12	4.1%
50 – 54 years	24	2.5%	16	2.4%	8	2.7%
55 years and above	21	%2.2	14	2.1%	7	2.4%
Missing info.	3	0.3%	3	0.5%	0	0.0%
Total	953	100.0	659	100.0	294	100.0%



The above analysis indicates that the workforce (i.e. employed and unemployed) of Mafraq is balanced in terms of males and females, while the employed males are more than double the employed females. This fact is attributed to several social and economic factors.

Most of the sample members fall within the 15 – 30 year age category (approximately 68% of the sample) which indicates the young nature of the workforce in Mafraq.

3. The marital status of the sample was divided among the main four statuses as illustrated in table (36):

Table 36: Marital Status of Mafrag Sample

Table 36 Marital status of the Mafrag sample						
Marital Status	Study sample		Unemployed and economically inactive		Employed	
	Number	%	Number	%	Number	%
Single	522	54.8%	440	66.8%	82	27.9%
Married	406	42.6%	201	30.5%	205	69.7%
Divorced	18	1.9%	11	1.7%	7	2.4%
Widow	7	0.7%	7	1.1%	0	0.0%
Total	953	100.0%	659	100.0%	294	100.0%

The sample shows that the number of the "single" persons slightly exceeds the number of "married" persons. On the other hand, the employed married people of the sample highly exceed the employed single people. According to the sample, the average family consisted of (6) members.

4. Analysis of the education level of unemployed workforce revealed interesting results as listed in tables (37), (38) and (39):

Table 37: School Education Level in Mafrag Sample

Table 37 School Education Level of unemployed and economically inactive in Mafrag Sample						
School Degree	Males		Females		Total	
	Number	%	Number	%	Number	%
1. Academic stream						
Information Management	11	8%	10	5%	21	6%
Literature	92	65%	159	82%	251	75%
Science	38	27%	25	13%	63	19%
Total	141	100%	194	100%	335	100%
2. Vocational stream						
Housekeeping	0	0%	3	20%	3	12%
Child care	0	0%	4	27%	4	16%
Agriculture	2	20%	3	20%	5	20%
Health care	3	30%	0	0%	3	12%
Nursing	2	20%	4	27%	6	24%
Industrial	3	30%	0	0%	3	12%
Other vocations	0	0%	1	7%	1	4%
Total	10	100%	15	100%	25	100%
3. Other streams						

Table 37
School Education Level of unemployed and economically inactive in
Mafraq Sample

School Degree	Males		Females		Total	
	Number	%	Number	%	Number	%
Religious	0	0%	3	50%	3	43%
Commercial	0	0%	1	17%	1	14%
General Secondary	1	100%	2	33%	3	43%
Total	1	100%	6	100%	7	100%
Grand Total	152	41.4%	215	58.6%	367	100%
Total unemployed	277		382		659	

The majority of the unemployed and economically inactive hold secondary academic school degrees (91.3% of the general secondary certificate graduates), while secondary vocational school degree holders represent only (6.8%). This indicates a significant deficiency in the supply of vocational/industrial school graduates in Mafraq.

Figure 3.1: Distribution of secondary certificate holders among the unemployed and economically inactive

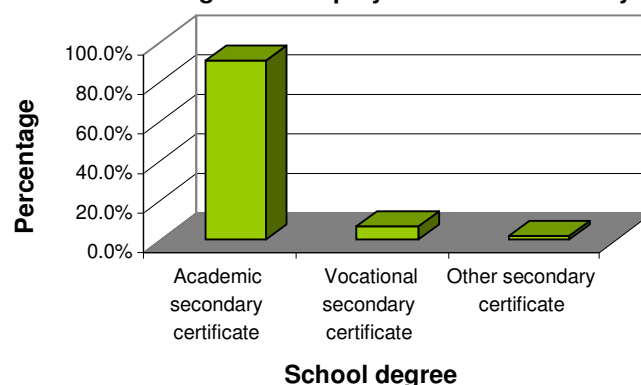


Figure 3.2: Distribution of secondary certificate holders among the unemployed and economically inactive males

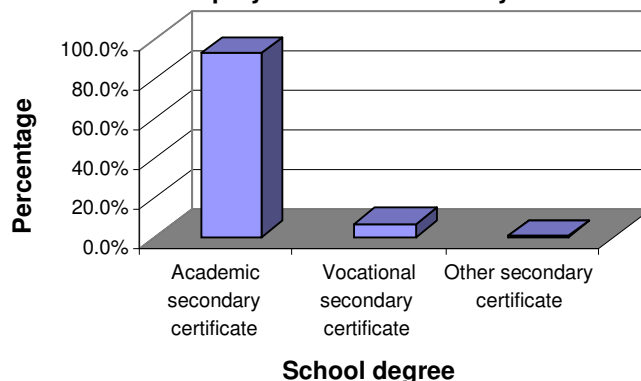


Figure 3.2: Distribution of secondary certificate holders among the unemployed and economically inactive females

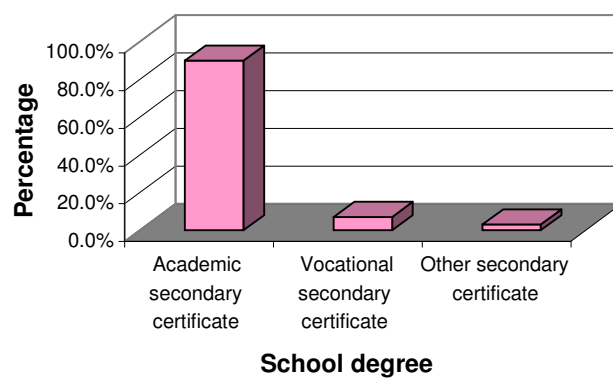
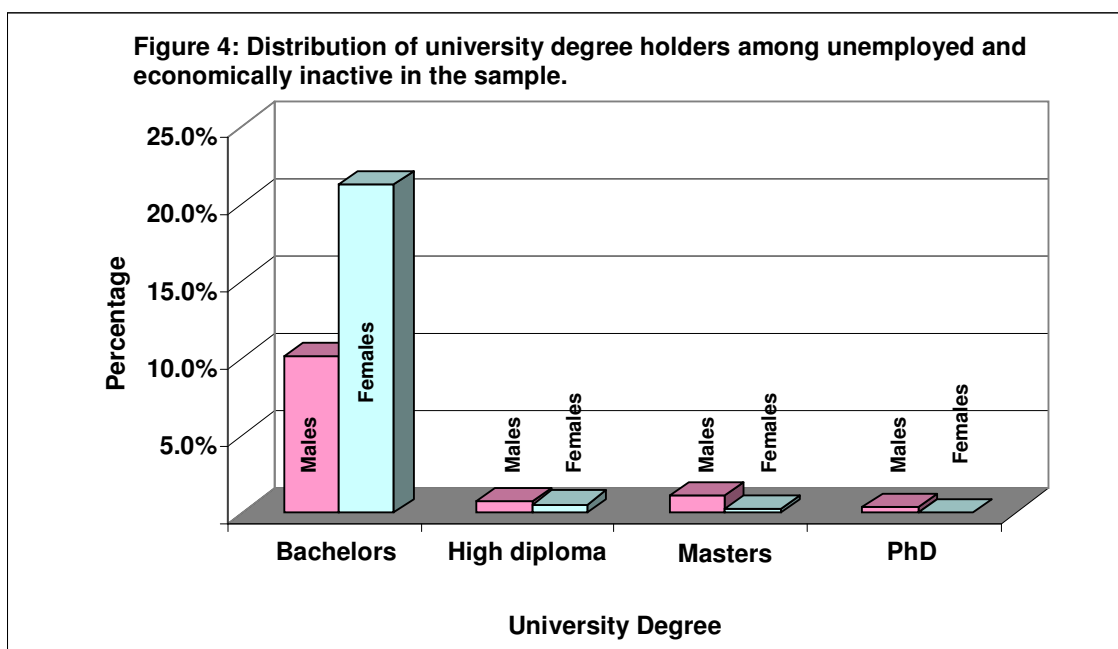


Table 38: Distribution of Mafrag Sample According to Higher Education Degree and Specialization

Table 38 Distribution of unemployed and economically inactive according to higher education degree and field of study in Mafrag Sample						
University Degree	Males		Females		Total	
	Number	%	Number	%	Number	%
1. Bachelors Degree						
Tourism and antiquities	1	4%	0	0%	1	1%
Business administration	2	7%	0	0%	2	2%
School orientation	1	4%	1	1%	2	2%
Housekeeping	0	0%	1	1%	1	1%
Animal production	1	4%	0	0%	1	1%
Finance and banking	3	11%	0	0%	3	3%
Strategic studies and international relations	1	4%	0	0%	1	1%
Arabic literature	2	7%	8	10%	10	9%
English literature	0	0%	10	12%	10	9%
History	0	0%	1	1%	1	1%
Child education	0	0%	9	11%	9	8%
French language	0	0%	1	1%	1	1%
ICT	1	4%	0	0%	1	1%
Nursing	1	4%	0	0%	1	1%
Religion principles	1	4%	3	4%	4	4%
Computer science	2	7%	0	0%	2	2%
Earth science (geology)	0	0%	1	1%	1	1%
Military sciences	1	4%	0	0%	1	1%
Physics	0	0%	1	1%	1	1%
Law	3	11%	1	1%	4	4%
Chemistry	2	7%	2	2%	4	4%
Accounting	2	7%	0	0%	2	2%
Accounting and commercial law	0	0%	1	1%	1	1%
Classroom teacher	1	4%	38	47%	39	36%
MIS	2	7%	0	0%	2	2%
CIS	1	4%	0	0%	1	1%
Electronic engineering	0	0%	1	1%	1	1%
Computer engineering	0	0%	1	1%	1	1%
Agriculture engineering	0	0%	1	1%	1	1%
Total	28	100%	81	100%	109	100%
2. High Diploma						
ICT	1	50%	2	100%	3	75%

Table 38 Distribution of unemployed and economically inactive according to higher education degree and field of study in Mafrq Sample						
University Degree	Males		Females		Total	
	Number	%	Number	%	Number	%
Intellectual property	1	50%	0	0%	1	25%
Total	2	100%	2	100%	4	100%
3. Masters						
Conflicts and peace studies	1	33%	0	0%	1	25%
Chemistry	1	33%	1	100%	2	50%
Social studies curricula	1	33%	0	0%	1	25%
Total	3	100%	1	100%	4	100%
4. PhD						
Conflicts and peace studies	1	100%	0	0%	1	100%
Total unemployed	277		382		659	

As indicated in table (38), about 16.5% of the unemployed in the sample hold an undergraduate (bachelors) degree. The females holding undergraduate degrees are double the males as shown in the following figure:



By reviewing the specializations of the unemployed university graduates in Mafrq, it becomes evident that the commonly studied specializations include Art, Literature, Education, Teaching and Computer, which poorly respond to the expected requirements of the KHBTD.

Result:

Unemployed and economically inactive university graduates in Mafrq are mainly specialized in classroom teaching, Arabic literature, English literature and child education, which are irrelevant to the labor requirements of KHBTD.

Table 39: Distribution of Mafrq Sample According to Diploma Specialization

Table 39 Distribution of the unemployed and economically inactive according to intermediate community college diploma field in Mafrq Sample						
Intermediate Diploma	Males		Females		Total	
	Number	%	Number	%	Number	%
1. Two years diploma						
Child education	1	14.3%	12	63.2%	13	50.0%
Fashion design	0	0.0%	2	10.5%	2	7.7%
Nursing	1	14.3%	0	0.0%	1	3.8%
Office administration	0	0.0%	1	5.3%	1	3.8%
Religion	0	0.0%	1	5.3%	1	3.8%
Fine arts	0	0.0%	1	5.3%	1	3.8%
Law	1	14.3%	0	0.0%	1	3.8%
English language	0	0.0%	1	5.3%	1	3.8%
Accounting	2	28.6%	1	5.3%	3	11.5%
IT classroom teacher	1	14.3%	0	0.0%	1	3.8%
Mechanical engineering	1	14.3%	0	0.0%	1	3.8%
Total	7	100%	19	100%	26	100%
2. Three years diploma						
Nursing	0	0%	1	100%	1	50%
Airplanes engines engineering	1	100%	0	0%	1	50%
Total	1	100%	1	100%	2	100%
Grand Total	8	28.6%	20	71.4%	28	100%
Total unemployed	277		382		659	

Table (39) confirms the limited supply of intermediate diploma graduates among unemployed and economically inactive because only 4.2% of the unemployed in the Mafrq sample hold a Community College diploma. Again, females are dominant since 71.4% of the intermediate diploma holders are females. A few of the intermediate graduates may be useful for KHBTDA in terms of specializations such as Accounting, Office Administration and Mechanical Engineering.

- Analysis of the training gained by Mafrq sample focuses on the practical skills usually demanded in the labor market. The vocational training graduates represent the most important workforce for the KHBTDA. The results of the survey regarding this aspect indicate some interesting facts as shown below in table (40):

Table 40: Distribution of Mafrag Sample According to Vocational Training Level and Specialization

Table 40 Vocational training centers graduates among the unemployed and economically inactive in Mafrag Sample						
Vocational Level	Males		Females		Total	
	Number	%	Number	%	Number	%
1. Limited skill						
Hairdressing and make up	0	0%	1	50%	1	33.3%
Typing	0	0%	1	50%	1	33.3%
Computer applications user	1	100%	0	0%	1	33.3%
Total	1	100%	2	100%	3	100%
2. Skilled						
Air conditioning	1	50%	0	0%	1	50%
Sports	1	50%	0	0%	1	50%
Total	2	100%	0	0%	2	100%
3. Technician						
Typing	0	0%	2	100%	2	100%
4. Specialized professional						
Religion principles	1	11.1%	0	0%	1	5.6%
Child education	0	0%	1	11.1%	1	5.6%
Law	1	11.1%	0	0%	1	5.6%
Arabic language	2	22.2%	0	0%	2	11.1%
Classroom teacher	3	33.3%	6	66.7%	9	50.0%
Islamic education field teacher	0	0%	1	11.1%	1	5.6%
Arabic field teacher	0	0%	1	11.1%	1	5.6%
MIS	2	22.2%	0	0%	2	11.1%
Total	9	100%	9	100%	18	100%
Grand Total	12	48%	13	52%	25	100%
Total unemployed	277		382		659	

The Mafrag sample has few unemployed and economically inactive people who hold vocational level certificates. Moreover, these vocational occupations are irrelevant to the KHBTD industries. The proportions of the unemployed with vocational level skill are 3.8%.

Nevertheless, unemployed and economically inactive persons in the sample have attended and completed certain training courses held by different institutions in the public or private sectors, to gain skills that might help them in securing jobs. Table (41) details the gained training of the unemployed and economically inactive among Mafrag sample:

Table 41: Training Courses Attended by Mafraq Sample

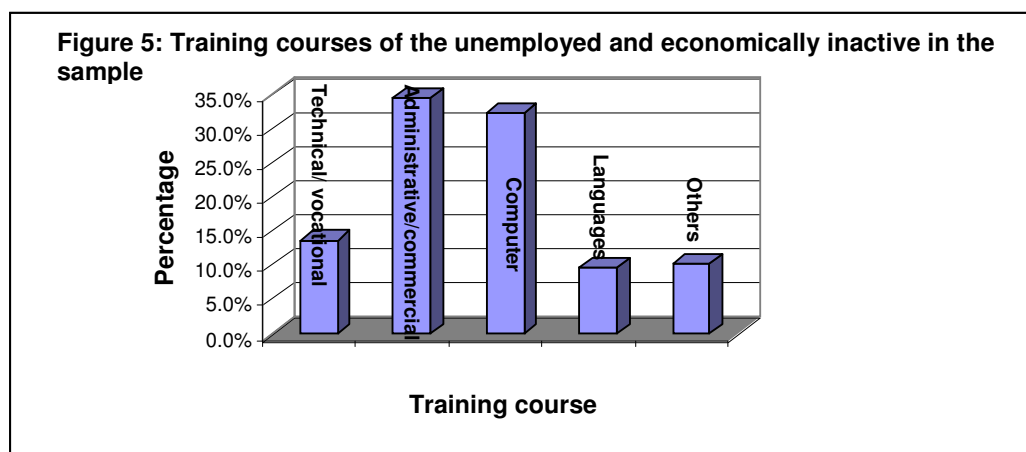
Table 41 Training courses attended and completed by unemployed and economically inactive in Mafraq Sample						
Training Course	Males		Females		Total	
	Number	%	Number	%	Number	%
Technical/vocational						
CMD	1	9%	0	0%	1	2%
Hairdressing and make up	1	9%	8	25%	9	21%
Sewing and tricot	0	0%	18	56%	18	42%
Flowers arrangements	0	0%	5	16%	5	12%
Air conditioning maintenance	1	9%	0	0%	1	2%
Computer maintenance	5	45%	1	3%	6	14%
Electrical appliances maintenance	3	27%	0	0%	3	7%
Total	11	100%	32	100%	43	100%
Administrative/commercial						
General management	0	0	1	1%	1	1%
Sales	2	9%	2	2%	4	4%
Marketing	3	13%	0	0%	3	3%
Life project course	0	0%	1	1%	1	1%
Typing	6	26%	32	37%	38	35%
Accounting	2	9%	2	2%	4	4%
Secretary and office management	10	43%	48	56%	58	53%
Total	23	100%	86	100%	109	100%
Computer						
Comprehensive computer course (MS applications)	33	100%	69	100%	102	100%
Languages						
English	16	76%	5	56%	21	70%
Spanish	1	5%	0	0%	1	3%
German	1	5%	2	22%	3	10%
French	2	10%	1	11%	3	10%
Malaysian	1	5%	0	0%	1	3%
Italic	0	0%	1	11%	1	3%
Total	21	100%	9	100%	30	100%
Others						
Training of Trainers	1	5%	0	0%	1	3%
PCM and agriculture activity	1	5%	0	0%	1	3%
Photography	2	10%	0	0%	2	6%
INJAZ course	10	48%	11	100%	21	66%
Air conditions and engines technician and maintenance	1	5%	0	0%	1	3%
Security and guarding	3	14%	0	0%	3	9%

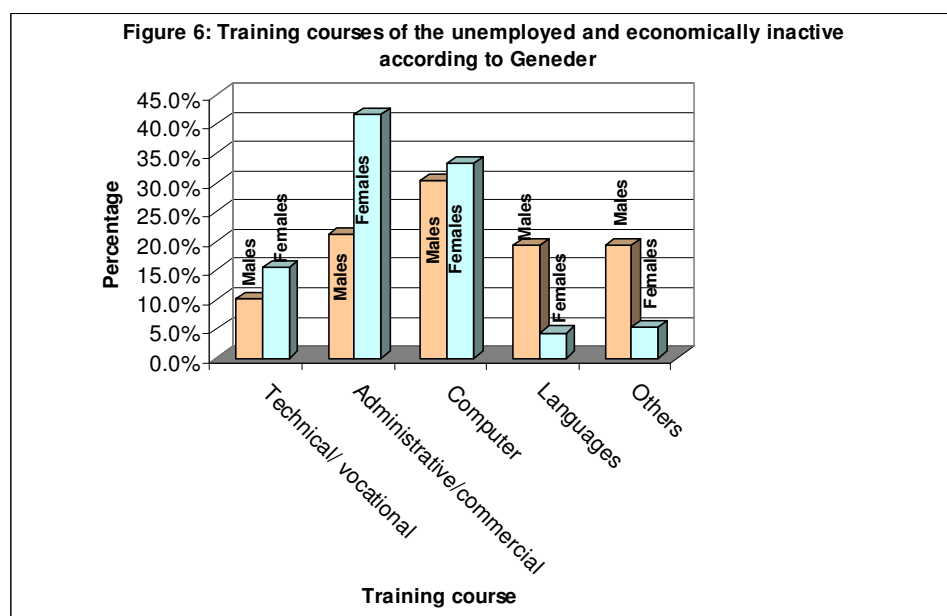
Table 41 Training courses attended and completed by unemployed and economically inactive in Mafrqa Sample						
Training Course	Males		Females		Total	
	Number	%	Number	%	Number	%
Public relations	2	10%	0	0%	2	6%
Clothes ironing	1	5%	0	0%	1	3%
Total	21	100%	11	100%	32	100%
Grand Total	109	34.5%	207	65.5%	316	100%
Total unemployed	277		382		659	

The above results indicate the preference of administrative/commercial and computer courses among the unemployed and economically inactive. In terms of gender, males are more attracted to the languages and other courses than females. In particular, females prefer the administrative/commercial and computer courses over other courses. The gained training could enhance the skills of the unemployed and increase their chances in finding jobs.

Result:

The major training courses attended by Mafrqa unemployed and economically inactive include garments sewing and tricot, typing, secretary and office management, comprehensive computer course, English language and INJAZ course.





6. The minimum educational qualification is considered General Secondary Certificate (GSC) in Jordan. according to the results of the study, people holding educational qualifications less than GSC of the sample ranged between illiterate to secondary school level, and were distributed as demonstrated in table (42):

Table 42: Employment of Low-educated People in Mafrag Sample

Table 42 Employment status of people holding less-than-minimum educational qualification in Mafrag sample						
Educational level	Study sample		Unemployed		Employed	
	Number	%	Number	%	Number	%
Illiterate	10	3.2%	7	3.2%	3	3.3%
Literate	24	7.8%	14	6.5%	10	10.9%
Primary school	26	8.4%	18	8.3%	8	8.7%
Elementary school	135	43.8%	91	42.1%	44	47.8%
Other (secondary...)	113	36.7%	86	39.8%	27	29.3%
Total	308	100.0%	216	100.0%	92	100.0%

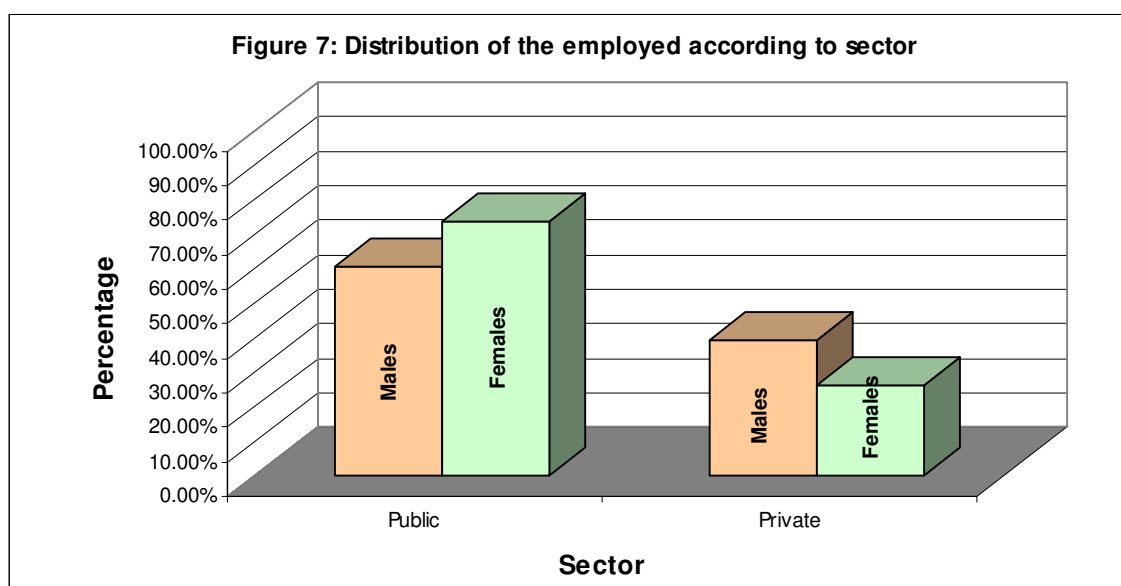
The Mafrag workforce is known to have a high proportion of poorly educated people. This group represents about 32.3% of the total workforce. The majority of this group are elementary and secondary school enrolled people, who failed to complete the requirements of the general secondary school certificate (GSC). Those may have good potential for rehabilitation in technical education or vocational training.

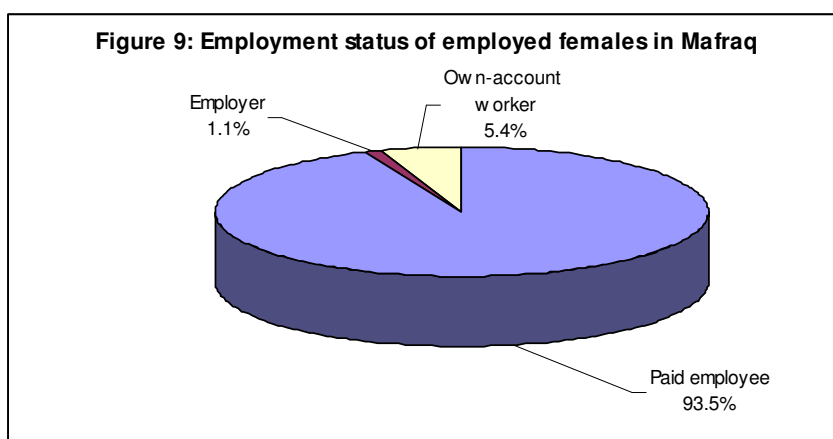
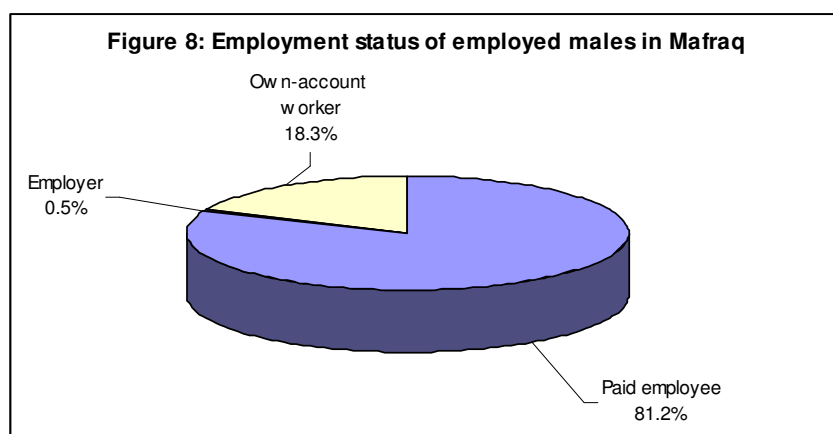
7. The employed people were distributed among public and private sectors in several aspects in terms of employment status as in table (43):

Table 43: Employment Sector and Status of Workforce in Mafraq Sample

Table 43 Employment sector and status of current work held by employed workforce in Mafraq Sample						
Sector	Males		Females		Total	
	Number	%	Number	%	Number	%
Public	118	60.5%	68	73.9%	186	64.8%
Private	77	39.5%	24	26.1%	101	35.2%
Total	195	100%	92	100%	287	100%
Employment status						
Paid employee	164	81.2%	86	93.5%	250	85%
Employer	1	0.5%	1	1.1%	2	0.7%
Own-account worker	37	18.3%	5	5.4%	42	14.3%
Unpaid family worker	0	0%	0	0%	0	0
Total	202	100%	92	100%	294	100%

The employed in the sample are concentrated in the public sector. The proportion of females working in the public sector is higher than the proportion of males. More males (18.3%) prefer to be self-employed and have their own business (small project or enterprise) compared to females (5.4%)





8. When the employed people were asked about their intentions of changing current work, more than half of them did not intend to change the current work. Overall, about **44.6%** of the employed persons are looking for new jobs. It was found that more employed males intend to change current work than females as demonstrated in table (44):

Table 44: Possible Turn over in Mafrq Sample

Table 44 Intention of changing current work by employed workforce in Mafrq Sample						
Intend to change work	Males		Females		Total	
	Number	%	Number	%	Number	%
Yes	92	45.5%	31	33.7%	123	41.8%
No	110	54.5%	61	66.3%	171	58.2%
Total	202	100%	92	100%	294	100%
Looking for a new job						
Yes	97	48%	34	37%	131	44.6%
No	105	52%	58	63%	163	55.4%
Total	202	100%	92	100%	294	100%

By looking at the above indicators, it is worth mentioning that a few of the currently employed, who stated that they do not intend to change work, are looking for new jobs. This can be interpreted as a process of USAID Jordan Economic Development Program

investigating labor market opportunity and is valued by the employed for different reasons (e.g. to negotiate better working conditions, position or salary with the current employer). Within the same context, unemployed may or may not be looking for a job due to several personal reasons such as having another source of income (e.g. real estate revenues). The percentage of total job seekers in Mafrag is **71.3%** of the unemployed workforce according to the sample results. There are more male than female job seekers in the community as indicated in table (16).seekers in the community as indicated in table (45).

Table 45: Mafrag Sample According to Search for Jobs

Table 45 Searching for jobs by unemployed and economically inactive in Mafrag Sample						
Looking for a job	Males		Females		Total	
	Number	%	Number	%	Number	%
Yes	221	79.8%	249	65.2%	470	71.3%
No	56	20.2%	133	34.8%	189	28.7%
Total	277	100%	382	100%	659	100%

Due to personal reasons, 28.7% of the unemployed is not interested in searching for jobs. They are considered out of the scope of labor supply. Accordingly, the total labor supply in the sample calculated as job seekers (either employed or unemployed) is **63.1%** of the actual workforce.

Result:

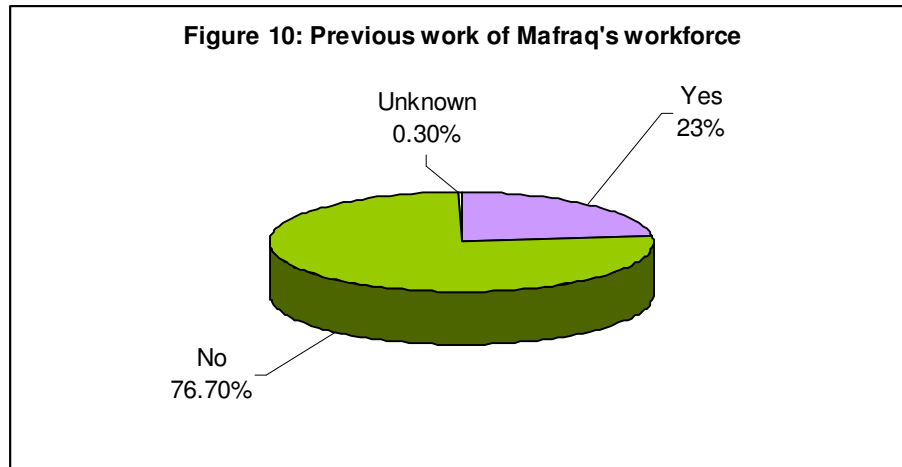
- **About 44.6% of the employed persons in Mafrag are looking for new jobs.**
- **The total job seekers among the unemployed are 71.3%**
- **The total labor supply or job seekers are 63.1% of Mafrag sample including employed and unemployed.**

9. Another essential aspect of the workforce is the previous work history, because it indicates the level of work experience and the frequency of turnover or job stability. Some of the currently employed have held one or more work positions before their current work. This also applies to those who are unemployed. Some of the unemployed have never been employed before, as well as the currently employed. All these cases were observed in the Mafrag sample (table 46):

Table 46: Previous Work of Mafrag Sample

Table 46 Previous work of workforce in the Mafrag sample						
Previous work	Study population		Unemployed		Employed	
	Number	%	Number	%	Number	%
Yes	219	23%	137	20.8%	82	27.9%
No	731	76.7%	522	79.2%	209	71.1%
Unknown	3	0.3%	0	0%	3	1%
Total	953	100.0%	659	100.0%	294	100.0%

According to the above results, most of the sample has not been previously employed. Only 20% of the unemployed had previous job(s). More than 70% of the currently employed are still holding their first job at the time of the survey, which indicates high job stability.



10. In order to understand the work motives and conditions favored by the workforce, the survey included questions about the main reasons for leaving previous jobs (or intentions to change current work). The recurrent reason was the financial insufficiency of the job. Other reasons vary in their importance as listed in table (47):

Table 47: Reasons for Leaving or Changing Jobs by Mafrag Sample

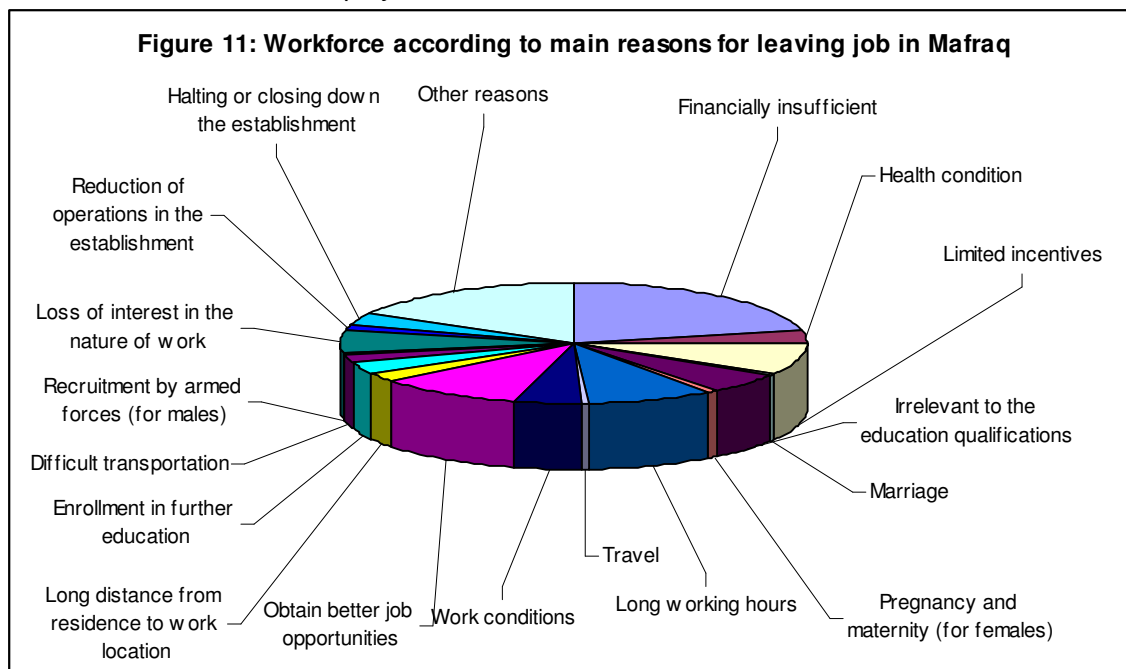
Table 47 Reasons for leaving jobs or changing current work by Mafrag Sample						
Reason	Males		Females		Total	
	Number	%	Number	%	Number	%
Financially insufficient	55	37.7%	37	62.7%	92	44.9%
Health condition	11	7.5%	3	5.1%	14	6.8%
Limited incentives	24	16.4%	13	22.0%	37	18.0%
Marriage	0	0.0%	3	5.1%	3	1.5%
Irrelevant to the education qualifications	14	9.6%	8	13.6%	22	10.7%
Pregnancy and maternity (for females)	0	0.0%	3	5.1%	3	1.5%
Long working hours	29	19.9%	8	13.6%	37	18.0%
Travel	1	0.7%	2	3.4%	3	1.5%
Work conditions	14	9.6%	5	8.5%	20	9.8%
Obtain better job opportunities	30	20.5%	12	20.3%	42	20.5%
Long distance from residence to work location	7	4.8%	4	6.8%	11	5.4%
Enrollment in further education	8	5.5%	5	8.5%	13	6.3%
Difficult transportation	7	4.8%	3	5.1%	10	4.9%
Recruitment by armed forces (for males)	1	0.7%	0	0.0%	1	0.5%
Loss of interest in the nature of work	22	15.1%	5	8.5%	27	13.2%
Reduction of operations in the establishment	4	2.7%	1	1.7%	5	2.4%
Halting or closing down the establishment	7	4.8%	7	11.9%	14	6.8%
Other reasons	57	39.0%	15	25.4%	72	35.1%
Total	146	100.0%	59	100.0%	205	100.0%

As shown in the above table, the main three reasons for leaving the job include:

- Inadequate financial income.
- New and better work opportunity.
- Long working hours / limited incentives

There is a range of other diversified reasons mentioned by workforce such as:

- Retirement from job.
- Dismissal by the management.
- End of contract with the employer.



11. Types of skills among Mafrag's workforce were assessed in the study. The skills were self-assessed by the workforce during the survey, without any cross-reference with any other source (e.g. certificate, test). The sample was divided according to gained skills as follows:

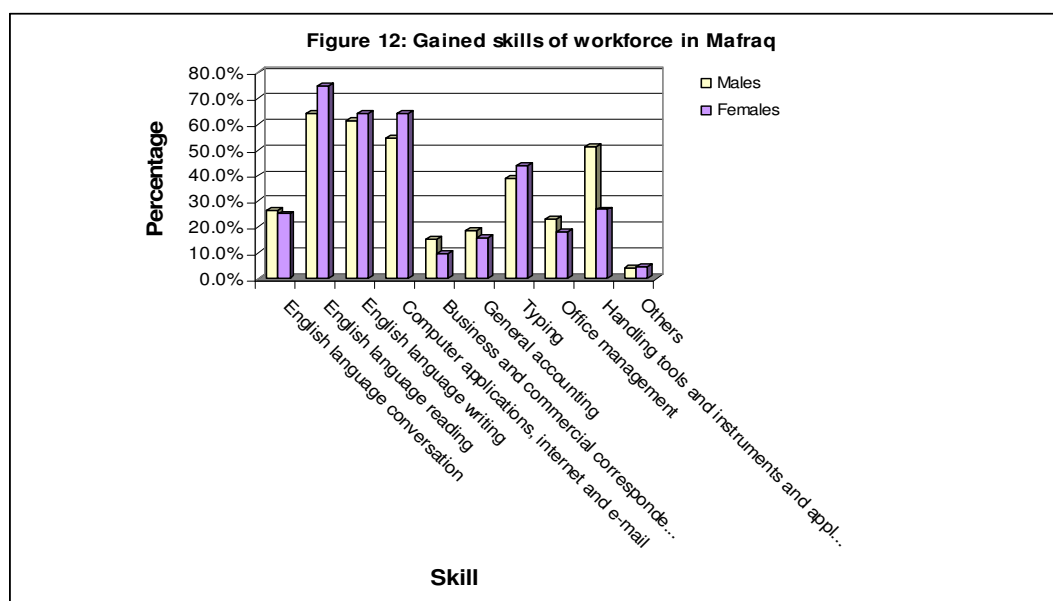
Table 48: Gained Skills by Mafrag Sample

Table 48 Gained skills by Mafrag Sample						
Gained skill	Males		Females		Total	
	Number	%	Number	%	Number	%
English language conversation	127	26.5%	119	25.1%	246	25.8%
English language reading	307	64.1%	354	74.7%	661	69.4%
English language writing	293	61.2%	338	71.3%	631	66.2%
Computer applications, internet and e-mail	262	54.7%	304	64.1%	566	59.4%
Business and commercial correspondences	73	15.2%	46	9.7%	119	12.5%
General accounting	90	18.8%	75	15.8%	165	17.3%
Typing	187	39.0%	208	43.9%	395	41.4%
Office management	111	23.2%	85	17.9%	196	20.6%
Handling tools and instruments and appliances	245	51.1%	127	26.8%	372	39.0%

Table 48
Gained skills by Mafraq Sample

Gained skill	Males		Females		Total	
	Number	%	Number	%	Number	%
Others	20	4.2%	21	4.4%	41	4.3%
Total	479	100%	474	100%	953	100%

As per the answers of the sample, the weak skills among Mafraq's sample members include business and commercial correspondences, general accounting, office management and other skills. The workforce claimed having average English skills (reading and writing) and computer applications skills. Since this is a self-assessment question, respondents tend to overestimate their capability and skills, assuming that it would affect their chances in finding jobs in the future.



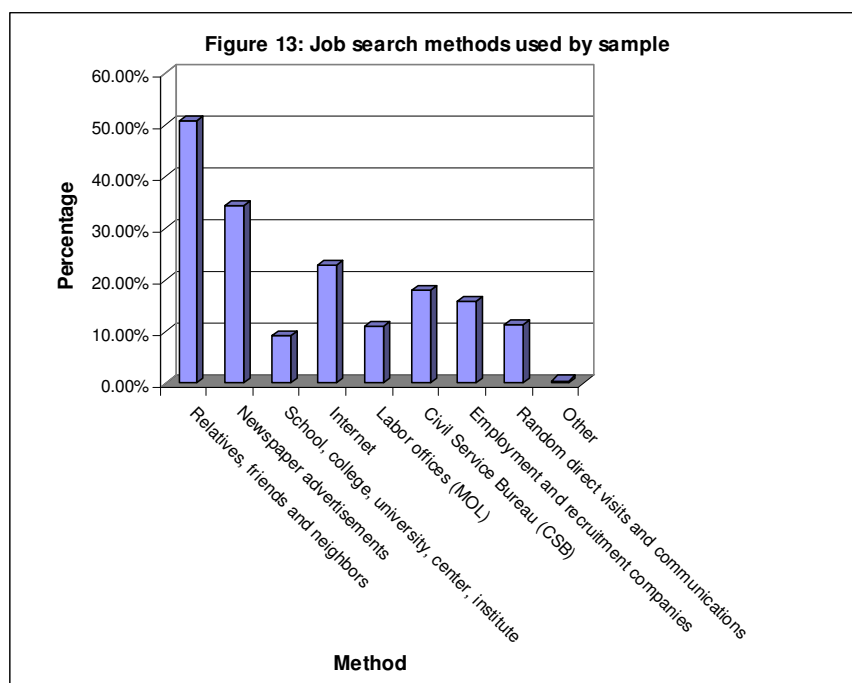
As presented above, females gained skills in the English language, computer skills and typing, while males are more skilled in terms of general accounting, office management and handling of tools. Other skills indicated in the above table include data entry, handcrafts, clothes making, teaching, communication, maintenance, training, marketing and fieldwork.

12. Job seekers usually use different job search techniques and resources in order to secure the best and most suitable jobs for them. It was found that about **63.1%** of the sample are considered "job seekers" either employed or unemployed. The job seekers reported the use of several job search techniques as illustrated in table (49) below:

Table 49: Job Search Methods

Table 49 Job search methods used by Mafraq Sample						
Job search methods	Males		Females		Total	
	Number	%	Number	%	Number	%
Relatives, friends and neighbors	258	53.9%	227	47.9%	485	50.9%
Newspaper advertisements	170	35.5%	159	33.5%	329	34.5%
School, college, university, center, institute	36	7.5%	53	11.2%	89	9.3%
Internet	117	24.4%	101	21.3%	218	22.9%
Labor offices (MOL)	60	12.5%	45	9.5%	105	11.0%
Civil Service Bureau (CSB)	53	11.1%	118	24.9%	171	17.9%
Employment and recruitment companies	87	18.2%	65	13.7%	152	15.9%
Random direct visits and communications	54	11.3%	54	11.4%	108	11.3%
Other	3	0.6%	2	0.4%	5	0.5%
Total	479		474		953	

The most widely used job search method in Mafraq is through relatives, friends and neighbors. This method saves time, effort and money. Second is the "newspaper search" method, and third is the internet.



13. Both private and public sector provide job opportunities in Mafraq. In addition, the armed forces (military service, police services, civil defense) account for a significant part of employment. In terms of sector preference among Mafraq workforce, it was found that most of the workforce prefer to work in the public sector:

Table 50: Preferred Sector for Work by Mafraq Sample

Table 50 Preferred sector by workforce in Mafraq Sample						
Sector	Males		Females		Total	
	Number	%	Number	%	Number	%
Public sector	137	42.9%	183	64.2%	320	53.0%
Private sector	152	47.6%	86	30.2%	238	39.4%
Armed forces	30	9.4%	16	5.6%	46	7.6%
Total workforce	319	100.0%	285	100.0%	604	100.0%

Females favor public sector jobs unlike males, due to the favored conditions, stability and fringe benefits. On the other hand, males are more interested in joining armed forces due to inherited traditional and cultural beliefs. The sector mostly favored by males is the private sector. The workforce interested in the private sector highlighted few activities as being the most desirable for employment, which include:

- a) Transport, storage and telecommunication
- b) Personal and social services
- c) Finance, banking, insurance and real estate
- d) Agriculture
- e) Wholesale, retail and hotels and restaurants

14. In order to match the labor force supply with the labor demand, it is necessary to identify the priority jobs accepted by the workforce. Numerous jobs discussed with workforce as optional list for employment. (Table 51) include the relative priority of jobs as selected by the workforce in Mafraq:

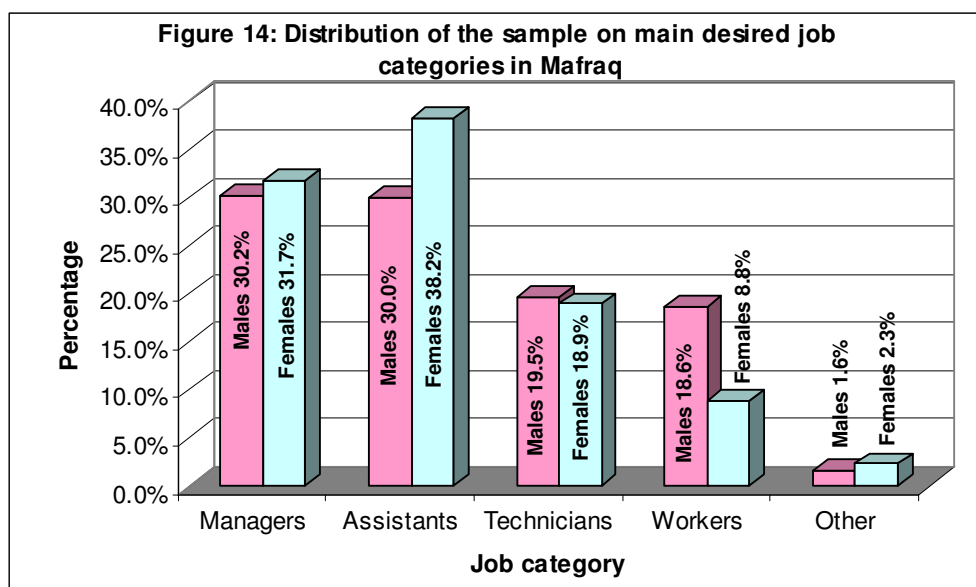
Table 51: Priority of Jobs by Mafraq Sample

Table 51 Desired jobs as prioritized by workforce in Mafraq Sample						
Desired Job / Position	Males		Females		Total	
	Number	%	Number	%	Number	%
Administrative manager	56	18%	46	16.9%	102	17.5%
Financial manager	15	4.8%	24	8.8%	39	6.7%
Human resources manager	19	6.1%	16	5.9%	35	6%
Logistics officer / manager	9	2.9%	8	2.9%	17	2.9%
Production manager	11	3.5%	7	2.6%	18	3.1%
Quality control manager	9	2.9%	11	4%	20	3.4%
Marketing / sales manager	18	5.8%	19	7%	37	6.3%
Maintenance manager	16	5.1%	3	1.1%	19	3.3%
Public relations manager	34	10.9%	32	11.8%	66	11.3%
Accountant	18	5.8%	16	5.9%	34	5.8%
Production / workers supervisor	41	13.2%	21	7.7%	62	10.6%
Production technician / assistant	2	0.6%	2	0.7%	4	0.7%
Production line operator	4	1.3%	1	0.4%	5	0.9%
Training officer	12	3.9%	16	5.9%	28	4.8%
Laboratory technician (quality)	8	2.6%	9	3.3%	17	2.9%

Table 51
Desired jobs as prioritized by workforce in Mafraq Sample

Desired Job / Position	Males		Females		Total	
	Number	%	Number	%	Number	%
Maintenance technician / assistant	6	1.9%	0	0%	6	1%
Storekeeper	29	9.3%	4	1.5%	33	5.7%
Laboratory analyst (R&D)	2	0.6%	2	0.7%	4	0.7%
Quality control technician	2	0.6%	3	1.1%	5	0.9%
Production worker	16	5.1%	19	7%	35	6%
Filling and packaging worker	4	1.3%	11	4%	15	2.6%
Packing and lifting worker	2	0.6%	0	0%	2	0.3%
Maintenance worker	6	1.9%	0	0%	6	1%
Computer maintenance technician	16	5.1%	9	3.3%	25	4.3%
Data entry	52	16.7%	75	27.6%	127	21.8%
Marketing / sales representative	13	4.2%	5	1.8%	18	3.1%
Stores worker	5	1.6%	0	0%	5	0.9%
Metal lathing / welding technician	2	0.6%	0	0%	2	0.3%
Hygiene and cleaning worker	0	0%	4	1.5%	4	0.7%
Fork lift driver	19	6.1%	0	0%	19	3.3%
Telephone operator / receptionist	47	15.1%	47	17.3%	94	16.1%
Secretary	18	5.8%	89	32.7%	107	18.4%
Security guard	21	6.8%	0	0%	21	3.6%
Vehicle driver	50	16.1%	1	0.4%	51	8.7%
Office boy / messenger	7	2.3%	10	3.7%	17	2.9%
Cafeteria worker	4	1.3%	1	0.4%	5	0.9%
Automobile mechanist	12	3.9%	0	0%	12	2.1%
Automobile electrician	4	1.3%	0	0%	4	0.7%
Other	10	3.2%	12	4.4%	22	2.8%
Total workforce	311		272		583	

The above table shows that there is high preference towards managerial and administration assistance positions, while technical and vocational work positions are not so popular among the workforce in Mafraq. A deep look into the results reveals the following categories and ratios:



Males are willing to accept technician and worker positions more than females, while females selected the assistant positions as priority for them.

15. KHBTDA is located in Mafrq governorate; it is of great importance to assess the perception of the workforce regarding job opportunities within Mafrq. When asked about this issue, 96.3% of the workforce confirmed accepting to work in Mafrq, given that the desired job was available. When the workforce was asked about the reasons that might drive them to work outside Mafrq (in other governorates of Jordan) or even outside Jordan, the main reason was improving their level of income. Another reason was for better working conditions.
16. Any job is judged by the workforce based on the factors and aspects discusses above (description, type, location, relevance to qualifications), in addition to the fringe benefits that are governed by the labor law. The workforce in Mafrq expects certain minimum fringe benefit that is to be provided by the employer. Without such benefits, the employer might face a problem in finding labor that accepts the job offer. The detailed required fringe benefits according to the sample are presented in table (52):

Table 52: Minimum Acceptable Fringe Benifits of Mafrq Sample

Table 52						
Minimum acceptable fringe benefits required by Mafrq Sample						
Fringe benefits	Males		Females		Total	
	Number	%	Number	%	Number	%
Social security membership	205	42.8%	221	46.6%	426	44.7%
Medical / healthcare insurance	195	40.7%	209	44.1%	404	42.4%
Transportation	94	19.6%	142	30%	236	24.8%
Accommodation	56	11.7%	67	14.1%	123	12.9%
Free daily meals	26	5.4%	50	10.5%	76	8%
Babies/children kindergarten	6	1.3%	55	11.6%	61	6.4%
Other	6	1.3%	0	0%	6	0.6%
Total workforce	479		474		953	

The top priority fringe benefits were social security membership, medical insurance and to a lesser extent, transportation. Females are more interested in having a kindergarten within the work place.

17. Another critical aspect of employment is the salary, which is the quantitative factor used by workforce to compare similar jobs at different locations and with different employers. The workforce was asked to declare previous/current job salary and the desired job expected salary, which was a sensitive question because of many considerations. The results ranged between (JD100) up to more than (JD 500) per month. The following tables contain the basic monthly salary estimates according to the sample in Mafraq:

Table 53: Salary Scale of Mafraq Sample

Table 53 Basic monthly salary of Mafraq Sample						
Previous / current salary	Males		Females		Total	
	Number	%	Number	%	Number	%
Less than 100 JD	10	6.3%	11	15.1%	21	9.0%
100 – 199 JD	36	2.5%	42	57.5%	78	33.5%
200 – 299 JD	70	3.8%	10	13.7%	80	34.3%
300 – 399 JD	31	19.4%	4	5.5%	35	15.0%
400 – 499 JD	8	5.0%	3	4.1%	11	4.7%
500 JD and more	5	3.1%	3	4.1%	8	3.4%
Total workforce	160	100.0%	73	100.0%	233	100.0%
Desired salary						
Less than 200 JD	36	11.5%	44	15.8%	80	13.5%
200 – 299 JD	139	44.4%	165	59.4%	304	51.4%
300 – 399 JD	87	27.8%	53	19.1%	140	23.7%
400 – 499 JD	20	6.4%	8	2.9%	28	4.7%
500 JD and more	31	9.9%	8	2.9%	39	6.6%
Total workforce	313	100.0%	278	100.0%	591	100%

Most workforce fall within the salary range of (JD100 – 300) in terms of previous or current job, while most expect a salary range of (JD 200 – 400) in terms of the new desired job. Usually females accept less monthly salary than males, which gives them an advantage in competing with males on certain jobs, given that the education, experience and skills are equal.

Result:

More than half of the workforce in Mafraq expects to receive a basic monthly salary of (JD 200 – 300) in their desired new jobs.

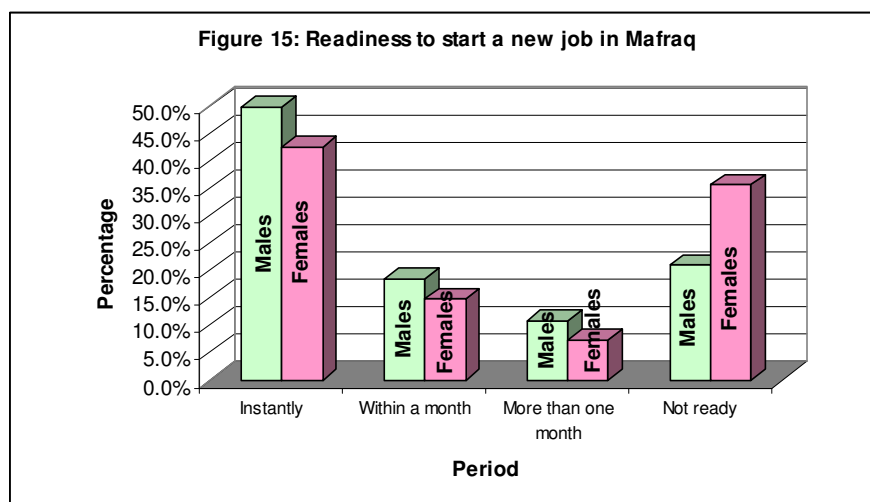
18. One of the barriers against employment is personal source of income, which is often undeclared by the workforce. It is a characteristic of the unemployed who is not interested in seeking or searching for a job. When investigating this issue with the workforce in Mafraq, only 11% declared that they have another personal source of income. Actual estimates are much higher, but due to the nature and sensitivity of this issue, people tend to hide other income sources, in order to benefit from the possible employment and social support programs targeting the poor and unemployed. The declared sources of income included retirement salary, real estate and farming.

19. The readiness for immediate employment is an indicator of the realistic need for the job opportunities available in the labor market. It is measured by the period required for the workforce to start work in a vacant position. The results of readiness to work were as follows in table (54):

Table 54: Job Start Period of Mafrq Sample

Table 54 Maximum period required for job seekers to start work in Mafrq Sample						
Period	Males		Females		Total	
	Number	%	Number	%	Number	%
Instantly	138	49.8%	162	42.4%	300	45.5%
Within a month	51	18.4%	56	14.7%	107	16.2%
More than one month	30	10.8%	28	7.3%	58	8.8%
Not ready	58	20.9%	136	35.6%	194	29.4%
Total workforce	277	100.0%	382	100.0%	659	100.0%

About half of the workforce is ready to start a new job immediately, while about one third is reluctant to start a job within a given period of time. Females seem to be slower than males in readiness to start a new job as demonstrated in the following figure:



20. Gender differences play a significant role in the employment of females as part of the workforce. Few factors, which are related to female workforce, were studied in Mafrq. Following is the analysis of these factors in table (55):

Table 55: Gender (female) Difficulties in Mafrq Sample

Table 55		
Gender difficulties affecting female workforce in Mafrq Sample		
A. difficulties encountered during search for a job	Number	%
Objection of parents/family/spouse	84	17.7%
Gender discrimination	52	11.0%
Low wages	178	37.6%
Other	32	6.8%
B. difficulties encountered during the work		
Balance between work and family responsibilities	90	19.0%
Dealing with superiors and colleagues during work	40	8.4%
Transportation and commuting	185	39.0%
Other	11	2.3%
C. Suitable environment for female worker		
Isolated from males	112	23.6%
Non-field work	89	18.8%
Short working hours	179	37.8%
Other	5	1.1%
Total female workforce	474	

The above table indicates interesting facts about the female workforce in Mafrq. For example, low wages compared with males is the most difficult factor encountered by females when searching and deciding on a job, while transportation reflects a major problem for the working woman. Most of the female workforce agreed that the suitable work condition for a woman is short daily working hours.

21. To assist in finding jobs for the workforce of Mafrq, MOL offered to include the information and requests of the interviewed persons on its NEES. About 67% of the interviewed workforce agreed to enter their data into NEES in order to benefit from the services of MOL. All the information (questionnaires) are expected to be forwarded to MOL in order to proceed with data entry.

C5. GAP ANALYSIS OF LABOR DEMAND AND SUPPLY

Measurement of the gap between the labor demand and the labor supply enables decision makers to create and support certain initiatives and programs that would lead to matching the supply with the demand.

When comparing the results of the labor demand profile of KHBTDA with the labor supply profile of Mafrq, important labor market aspects can be analyzed to assess the existing gap. Table (56) contains a summary of the labor force demand and supply gap analysis.

The labor supply numbers are calculated according to the estimated number of economically active segment of the Mafrq population which is approximately 58,000 persons (50,000 males and 8,000 females).

Table 56: Labor Force Gap Analysis

Table 56 Gap Analysis of Labor Demand and Supply for KHBTD and Mafrq			
Aspect	Demand	Supply	Gap
Total Labor	Estimated 550 job vacancies in KHBTD during the first year of operations.	63.1% of Mafrq's economically active population (aged over 16 years) is searching for jobs. (36,600)	No gap. Supply exceeds demand in terms of total labor.
Gender: Males Females Male/Female	96.2% of jobs (529) 1.5% of jobs (8) 2.3% of jobs (13)	79.8% of males job seeking (39,900) 65.2% of females job seeking (5,216)	No gap in the supply of male and female labor. Nevertheless, the proportion of jobs for females is extremely low.
Education: Literate Elementary/Basic/Pre-secondary General Secondary VTC Diploma University Degree	17.5% of the jobs (96) 0.3% (2) 24.8% (136) 19.5% (107) 13.4% (74) 20.8% (115)	2.5% of the workforce (1,450) 28.8% (16,700) 55.7% (32,300) 3.8% (2,200) 4.3% (2,500) 16.5% (9,570)	No gap. There is a huge demand on VTC graduates and technical diploma graduates in particular, compared to relatively low number of graduates in the market supply.
Jobs: Management (including office staff) Production/operations Quality Marketing and Sales Storage Maintenance Support and others	13.4% of the jobs (74) 44.1% (243) 3.8% (21) 4.8% (26) 10.8% (59) 7.7% (42) 15.4% (85)	68.1% of the desired jobs (39,500) 33.9% (19,660) 7.9% (4,580) 9.4% (5,450) 9.9% (5,740) 12.4% (7,200) 18.9% (10,960)	There is a no gap in the supply of labor. However, there is a high demand on production/operations jobs, while there is an excessive supply for the managerial and clerical jobs.
Sector: Industry (manufacturing) Services (logistics, stores)	72.5% of the jobs (399) 27.5% of the jobs (151)	39.4% of the workforce (22,850) prefers to work in the private sector. most of them are interested in the services (logistics, storage, transport, finance, banking, trade...etc)	There is a gap in the supply of workforce for the industrial sector in KHBTD.
Skills: English language Computer literacy Job-specific skills (e.g. accounting)	38.9% of jobs (214) 2% (11) 7.5% (41)	67.8% of workforce (39,320) 59.4% (34,450) 22.5% (13,000)	No gap. The workforce supply is equipped with the basic skills required by KHBTD companies.
Salary: Skilled labor/operators Middle Managers Senior Manager	150 – 300 JD 350 – 500 JD 1,000 – 3,500 JD	200 – 300 JD 300 – 500 JD More than 500 JD	Offered salaries by KHBTD companies match requested salaries by workforce
Benefits: Social Security Medical Insurance Transportation Accommodation	41.8% (230) 33.1% (182) 21.6% (119) 0.1% (1)	44.7% of workforce (25,920) 42.4% (24,600) 24.8% (14,380) 12.9% (7,480)	There is a gap in the offered benefits by KHBTD companies compared to those acceptable by workforce

C6. CONCLUSIONS

1. According to the results of the study, the actual unemployed workforce in Mafrq represents an alarming proportion (40.3%) and the job-seeking workforce (63.1%) indicates the urgent need for creation of new job opportunities in Mafrq.
2. The education levels and specializations of the unemployed and economically inactive sample weakly respond to the expected job opportunities created by the investments at KHBTD. Some of the attended training by the workforce may match the required skill profiles of the expected jobs, but there will still be a skill gap in certain jobs.

3. The widely attractive sector for workforce in Mafrq is the public sector, and this traditional perception was confirmed by the study. The local culture encourages people to look for and accept jobs in the governmental system, but this mentality is changing with time, particularly with the development of the private sector in Mafrq.
4. Employed workforce in Mafrq is recognized by job stability and loyalty, as shown by the study. Most employed workforce are retained in their jobs for considerable periods of time, and they have low rate of turn over. Therefore, it is an advantage to employ workforce in Mafrq. Non the less, Job creation and employment activities should focus on the unemployed and job seekers.
5. In recent years, Mafrq's workforce left previous jobs due to limited income generated; therefore, a new salary scale is required for the newly created jobs in Mafrq to facilitate recruitment of unemployed to ensure sustainability and stability of the employed.
6. There is a noticeable weakness among the workforce in the practical gained skills, especially business skills, general accounting, English language conversation and others. Upgrading of these skills is essential for employment.
7. Workforce in Mafrq is oriented towards top and middle management jobs, while the expected jobs to be created fall within the lower management and frontline (workers). This aspect should be treated and reoriented. The promotion of lower management and frontline jobs should be linked to an attractive salary scale and other benefits.
8. Some of the workforce rely on other sources of income than the job. This trend should be appreciated and supported, by prioritizing the recruitment of job seekers who lack any other source of income.
9. Few manageable difficulties face the employment of females in Mafrq including transportation, low wages and work environment. These problems can be easily addressed and resolved.
10. In general, the workforce in Mafrq is cooperative and open-minded, but they need to feel the tangible positive results of the initiatives of MDC and MOL. This result was concluded through the direct interaction of the survey team with the sample in Mafrq.

C7. RECOMMENDATIONS

1. MDC may contribute to the development of an **employment support initiative**, in order to institutionalize the process of monitoring the labor force indicators, and setting targets for matching the labor supply with the labor demand. A special unit or function could be assigned and trained to do this activity within KHBTD.
2. Actions and efforts should be taken to restructure the labor force supply profile in terms of education and specializations. The required knowledge, degrees, skills and specializations by the private sector should be the basis for **awareness and orientation campaigns** led by MDC, MOL and other local community organizations to direct the population and workforce towards the demanded qualifications in the labor market.
3. It is highly recommended to upgrade the personal skills of the workforce in Mafrq to match the labor demand profile of KHBTD. This may take the form of several initiatives carried out by national and local institutions such as universities, community colleges, civil society organizations and private institutes. There is an evident need to enhance the English language competencies among Mafrq's workforce. MDC should play a role in the **establishment of or partnering with professional business skills training and development centers** or institutes in Mafrq in cooperation with the stakeholders and main players, in order to cater for development needs of the workforce.
4. The limiting factor in matching the labor demand profile of KHBTD to the workforce in Mafrq will be the skills level rather than the education level. MDC may cooperate with MOL and VTC in order to design and conduct special technical training programs for the workforce in Mafrq. To assist workforce in undergoing the suitable training, **job-counseling services** may be offered by training centers.
5. Special attention should be paid to inclusion of more females in the workforce at KHBTD, by providing special benefits and incentives for the young females and the working woman. A **women employment program** could be a good starting point to address this recommendation.
6. MOL and other supporting organizations should encourage the unemployed who have other income sources to create small and medium size projects. This approach will assist in sustaining the original income, and creating few jobs for the other unemployed persons. Certain incentives and programs could be offered to **start-up businesses** to promote the self-employed entrepreneurship, such as **business incubators**.
7. MDC could play a major role in recruitment of workforce, by keeping and updating the labor force profile database, and provide **advocacy services** to improve the relationship between the employers and the employees.
8. MDC – in coordination with regulatory authorities – may develop an **incentives and exemptions package** for investors who offer improved salary scale for the expected new jobs that goes above the official minimum wage for workers. This will attract and retain the workforce of Mafrq in KHBTD.

D. APPENDICES

- Appendix (1): Labor force demand questionnaire
- Appendix (2): List of potential investors in KHBTDA
- Appendix (3): Summary report – testing of Mafrq labor force supply survey
- Appendix (4): Labor force supply survey questionnaire
- Appendix (5): Mafrq labor force supply survey fieldwork plan
- Appendix (6): List of references
- Appendix (7): List of companies
- Appendix (8): Meetings Schedule

Appendix (1): Labor force demand questionnaire

Labor Market Demand Survey

Questionnaire form No.	
Company Name:	
Interviewer Name:	
Interview Date:	
Interview Location:	
Interviewee Name:	
Interviewee Position:	

Appendix 2: King Hussein Ben Talal Development Area – Potential Companies October 2008

Project	Nature	Estimated Jobs	Development Agreement	Stage
MESC – Fujicura	Cables Manufacturing	300	signed	Started Trial production
Petra Engineering Industries	Air-Condition Manufacturing	1000	Signed	Started Construction
Asian Petroleum	Tanks Manufacturing	100	Signed	Construction will start Dec. 2008
Bahraini Jordanian Group	Cartons Manufacturing	200	Pending Development schedule	
Al Hamad Contracting	Aluminum Extrusion Manufacturing	400	Pending Development schedule	Construction will start Dec. 2008
Al Hamad Logistics	Cold Storage and Warehousing	40	Pending Development schedule	n/a
Aramex	Warehousing Logistics	20	Pending Development schedule	Started Drawings Engineering
Sukhetian	Warehousing Logistics	50	Pending Development schedule	Started Drawings Engineering
Future	Electrical Appliances	110	Pending Development schedule	n/a
Future Logistics	Warehousing Logistics	20	Pending Development schedule	n/a
Al Taher Group	Electrical Transformers manufacturing	400	Pending Development schedule	
Diamond	Aircraft Manufacturing	Under discussions		

Appendix 3 : Summary Report

Summary Report Testing Results of the Mafrq Labor Force Supply Survey Questionnaire

Submitted to
SABEQ
&
Mafrq Development Corporation

Prepared by



February 2009

Introduction:

Dajani Consulting in cooperation with SABEQ, Mafraq Development Corporation and Ministry of Labor developed a questionnaire form to be used as a survey tool to implement the labor force supply study in Mafraq.

The draft questionnaire form is composed from several parts including questions for employed, unemployed and females to cover the gender aspect. The target segment of the population consists from the youth and adults (males and females) with ages over 16 years old residing and living in Mafraq governorate.

The questions are supposed to reveal the profile of the labor force in Mafraq in terms of their education, past experience, employment status, desired jobs, desired benefits, salary history, minimum acceptable job conditions and other indicators.

In order to finalize the structure and contents of the draft questionnaire form, a pilot testing was performed to collect feedback from the field, and to ensure clarity and practicality of the questionnaire.

Methodology of Pilot Testing:

Two surveyors were assigned to collect 15 questionnaire forms randomly from the target segment in Mafrq, by interviewing them and filling out the form. The surveyors were given guidelines on how to select and approach the interviewees, and how to introduce themselves and the subject of the survey, then ask the questions and receive answers. The pilot survey was planned to be conducted at few areas in Mafrq.

During the interview, the surveyors were instructed to take notes and remarks about the interviewee's perception of the subject and the questions. Also they were instructed to calculate the time duration consumed to complete the interview.

Results:

The pilot testing of the questionnaire was conducted during 25th – 29th January 2009 in Mafrq. 16 questionnaire forms were collected during the pilot testing from different areas in Mafrq. The surveyors reported the following remarks:

1. At the first glance, interviewees felt the questionnaire was long due to the many pages in the form. But, once the surveyor explained the purpose of the survey and the type of questions (closed questions and multiple choice questions), the interviewee realized the simplicity of the form, and agreed to complete the questionnaire.
2. Most of the interviewees were interested to hear that attention is given to Mafrq in general and the labor force in particular by recognized official and private sector parties. This encouraged them to cooperate with the surveyors. Some of them even submitted their CVs to the surveyor.
3. There was some sensitivity in giving personal information by a female interviewee to a male surveyor, which is normal in Mafrq governorate. This was a minor remark which can be taken into consideration during the full survey.
4. All of the questions were clear and understandable by interviewees, with minimum intervention and clarification given by surveyors. This indicates the relevance and appropriateness of the questions and phrases in the form.
5. The question regarding the education level was very detailed, and starts from the upper level (higher degrees), while many of the target segment members hold lower degrees.
6. The desired jobs question was complex for some of the interviewees and even the surveyors, due to the administrative levels.
7. The average interview duration was 20 minutes. Some interviews took about 40 minutes, while others only took 15 minutes.

Recommendations and Actions:

Based on the results and comments of the pilot testing survey, we recommend the following:

1. In order to make the questionnaire more practical in the field, it is recommended to divide it into two versions: a) employed; b) unemployed. This action will reduce the number of pages. Also when printing and photocopying the form, questions could be printed on both pages of the sheet.
2. The survey team should include females as well as males to overcome the sensitivity problem and conduct the survey smoothly. It is also recommended to employ surveyors from Mafrq to overcome communication barriers.
3. Public awareness is essential in facilitating the survey process and giving credibility to the survey team. It is recommended to launch a media campaign prior to the start of the survey.
4. The professional training of surveyors is necessary to ensure the quality of the survey, therefore, a customized training program should be developed and carried out for the survey team.
5. The questionnaire should be modified in a way that makes it user-friendly in the field. Minor changes could be introduced in some parts as appropriate.

Labor Market Demand Survey

Background

Economic growth depends upon a qualified and willing labor force. Labor force analysis and profiles are needed to provide business and industry with the location, skills, education and training, ability and willingness to work of the labor force in Jordan. SABEQ has an overall goal of expanding jobs for Jordanians and achieving economic growth through expanding the private sector. The private sector needs information on the qualifications, location, and willingness of the Jordanian labor force. In an environment where foreign workers are prevalent and reputed to be better and cheaper workers, it is critical to assess the challenges that the employers are facing with the labor supply and the incentives that they are offering to attract that supply. In order to provide useful data that can be used to measure the gap between labor supply and demand, MDC and SABEQ have contracted Dajani Consulting Co. - a Jordanian consulting and research company - to conduct a study of the labor demand in the newly-established Mafrq Development Area (King Hussien Bin Talal Development Area), and your company was selected to be included in this survey study.

Survey Instructions

This questionnaire is designed and prepared to be completed with the new company or facility owner/ senior manager or representative during an interview, where the employer will give an overview about the company, their current plans for expansion and their labor needs during the next 5 years. It highlights more information about the current labor demand that the company needs, management and labor levels identifying their recruitment methodology and incentives scheme. The company is kindly requested to fill out this questionnaire with the most accurate and appropriate information. All of the collected information shall be handled with strict confidentiality, and shall be used only for study purposes.

1. Page 1:

Questions No. 1 to 6: contain the general identification and contact information.

Questions No. 7 to 10: contain the nature and description of the company.

Questions No. 7 and No. 8: the answer can be inserted from the provided list

Question No. 10: The amount of the production can be expressed as a number, and the unit can be inserted from the provided list.

Question No. 11: contains the main departments and sections of the company.

2. Page 2:

Question 12: Contains the standard labor demand profile that is required by the company in the full operational status. The tables are divided according to the departments. For each job title/position a number of variables should be completed. The variables can be inserted from the provided lists. More than one variable can be added in the same column using another cell in the next row.

In the No. variable, the answer should be the required number of the staff holding the same position.

In the Technical skills variable, the answer should include the required technical and vocational skills for the position (e.g. mechanical parts assembly for a mechanical engineer)

3. Page 3:

Question 13: Contains the estimated required number of labor during the first 5 years of operations, classified according to the department and position.

Question 14: Ranking of the factors from 1 to 8 according to its priority for the company, where 1 means the greatest challenge, and 8 means the unimportant challenge

