CHAPTER I: INTRODUCTION

1.0 Introduction

Human resource management refers to a strategic approach for the people working in the organization collectively contributing to the achievement of goals. The importance of human resource management has increased because management can achieve the organisational objectives only with the co-operation of the people working in the organisation (Berkes, 2009). Without the efficient use of human resources, management can never accomplish organisational objectives. Therefore, creating and maintaining a motivated workforce is the central responsibility of the management. However, it is argued that mistakes are caused by the fact that organizations generally give little thought to the critical nature of staffing decisions and make little or no attempt to validate staffing practices (Schuler, Budhwar, & Florkowski, 2002). When it comes to the oil and gas sector in Libya, the role of HRM practices is very little (Abozed, Melaine, & Saci, 2009).

The oil and gas sector plays a dominant role in the Libyan economy. Since 1958, the sector has undergone a series of developments. Libya first gave permission to international companies to extract oil in 1955 and in 1961 Libyan oil was exported and traded internationally (Bindra, 2008; Roudi Fahimi & Kent, 2007).
Libya gained its first international oil revenue during this year. By the 1970s, it had remarkable growth in terms of oil extraction and production. Libya became the sixth largest country for oil production and since 1968 the sector and subsidiary companies have been managed by the National Oil Corporation (NOC) (Abozed et al., 2009). NOC has handled the production and selling of oil in the global marketplace from 1968 till present. According to Outlook (2013), Libya has been an attractive country for European countries in terms of oil import and investments due to their high quality crude oil with low cost and its close location to other countries. However, Bindra (2008) mentioned that during the 1992 to 1999 period, sanctions led to reduced oil and gas production. In addition, Abozed et al., (2009); Roudi Fahimi and Kent (2007) iterated that, “The government of Libya has made attempts to make the country attractive to the foreign investors since the UN sanctions were lifted in 1999.” Along with countries like Morocco, Egypt, Tunisia, and Algeria, the Libyan economy has grown along with its population and have successfully grown its agricultural capacities and established industrialisation. Even though Libya is not very active in other resources except petrochemical, has abundant energy as well as natural gas that contribute heavily to its real GDP.

In addition, there are many issues in relation to optimal productivity by employees followed with standardised enrolment and staffing policies by the HRM within the oil sector. HR practices like selection of staff, hiring employees along with their motivation, decentralised decisions, job security, pay for performance, and the internal career ladders for employees have a great impact on organisational objectives. HRM practices in the oil
and gas sector especially in an emerging and developing country like Libya are of primary importance due to the huge reliance of its economy accounting for over 90% of the country’s GDP. Thus, it is obvious that the pros and cons of Libyan energy in relation to labour productivity must be investigated with special focus on HRM practices. According to Huselid (1995), “There is a rising agreement among the researchers that organisational human resource policies can improve labour productivity and organisational objectives like productivity and sale”.

In order to achieve organisational objectives, there have been many empirical investigations that focused on individual HRM practices. Studies like Huselid (1995) support the importance of HRM practices on increasing total firm productivity. Furthermore, Conti (2005) mentioned that, “training has an immediate effect on the labour productivity”, whereas according to Delaney and Huselid (1996), “information sharing has positive influence on productivity”. However, Bloom and Reenen (2011); Delaney and Huselid (1996); Park and Shaw (2013) concluded that HR practices have a positive influence on organisational outcomes across countries. Even though many studies discussed the linkage between HRM practices and labour productivity, revenue and performance, other studies were critical of the relationship Ruël and Bondarouk (2014); Tharenou, Saks, and Moore (2007); Woodrow and Guest (2014) citing concerns over the methods employed to determine the relationship between HRM practices and labour productivity. Thus it is a challenging issue to compare the findings across studies with the acceptable HRM practices for enhancing employee labour productivity and organisation outcomes.
Human resource management are not solely to blame for the reduction in oil production. There are many other reasons and issues for low extraction including political instability, low country reputation, market demand and supply, macro-economic consequences, technological and social issues, along with investment opportunities. At this stage, it is not possible for the research to focus on all the aspects and issues related to oil production and extraction. As a sole dominant exporting product and major source of export revenue for the Libyan economy, the investigation of issues in HR practices and their impact on labour productivity through the mediating effect of social skills becomes crucial. The gap in studies on the relation of HR practices and social skills to low labour productivity forms the main concern of this study.

1.1 Background of the Study

Libya has the largest proven oil reserve in Africa and is one of the top influential countries of the Organisation of the Oil Exporting Countries OPEC,O (2011) Unfortunately, in spite of these facts the average oil production of Libya is volatile and has seen a decreasing trend (Outlook, 2013). The Libyan economy is highly dependent on hydrocarbons for export earnings. The U.S. Department of State concluded that Libya’s oil export earns about 95% of its total export earnings, 75% of government earnings, and 25% of its GDP before the political unrest took place in 2011 (Outlook, 2013).

According to the recent survey published by Middle East Economic Digest reflects the significant qualitative differences in administrative quality, independence, and
profitability that distinguish these companies. While Algeria’s Sonatrach is considered as relatively well-managed with a high score on commercial performance and human resources and medium scores on technology, Egypt and Libya have NOCs that display only a mid-range profile. Sudan was not included in the survey, but on all the points, it would have scored quite low.

Table 1.1

Performance indicators of national oil companies

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Algeria</th>
<th>Libya</th>
<th>Egypt</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial Performance</td>
<td>8</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Production</td>
<td>6</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Reserves Replacement</td>
<td>4</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Downstream investment</td>
<td>4</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Partnership</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>Technology</td>
<td>6</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Overseas Investment</td>
<td>8</td>
<td>6</td>
<td>0</td>
</tr>
<tr>
<td>Independence</td>
<td>7</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td>Environment</td>
<td>7</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Human Resources</td>
<td>8</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td>63</td>
<td>46</td>
<td>45</td>
</tr>
</tbody>
</table>

Source: Fattouh and Darbouche (2010)

Given the differences in NOCs’ capabilities, the view that there will be less reliance on foreign oil companies cannot be easily generalized in the North African context. For heavy dependents such as Sudan and Egypt to a lesser extent, the financial capital, management skills and technology brought in by foreign oil companies are vital for their upstream sectors. In Sudan and Egypt, the need for foreign oil companies’ financial resources is felt particularly in the areas of exploration and development. The funds
allocated for exploration and development in these countries are too slim for the amounts required and the risks involved. The NOCs in Egypt and Sudan also lack the technological capability to deal with mature fields. Interestingly, some of these North African producers have benefited from the changing strategies of independents that seek to grow via acquisitions abroad. For the oil-rich NOCs of Libya and Algeria, the main task since nationalization has been to manage excess supply rather than growing capacity. In fact, these NOCs have little experience in dealing with large-scale capacity expansion projects. Further- more, as reservoirs age, maintaining output capacity is more expensive and more difficult. The maturity of producing basins will induce Sonatrach and Libyan NOC to develop a two-track exploration and production strategy.

The proven oil reserve of the country has increased while surprisingly the production of all kinds of petroleum products (which is considered as organisational output) decreased in Libya in 2012 compared to 2011 (Outlook, 2013). Notwithstanding, the percentage reduction in petroleum products is remarkable as compared to other African countries, particularly with Nigeria which a close competitor of Libya in terms of petroleum products (Outlook, 2013). Similarly, the average production of crude oil of Libya is also decreasing in the OPEC members. In 1970, the capacity of Libya was 33,180,000 barrels. Subsequently, the production of crude oil has decreased to 18,316,000 barrels in 1980. The annual statistical report of OPEC (2011) shows that the production of crude oil is 4,895,000 barrels per day which is only 14% compared to the 1970 average daily crude oil production. The capacity of the country is around 16 million barrels per day. Although the hydrocarbon sector contributes 95% to total exports, labour productivity in the oil sector has been heavily affected due to lack of accurate Human
Resource (HR) practices for the extraction of crude oil and its management (Bindra, 2008).

Before Gadhafi’s exclusion, Libya’s oil industry was run by National Oil Corporation (NOC). The NOC was liable for applying the Exploration and Production Sharing Agreements (EPSA) with international oil companies (IOCs), as well as its own field development and other activities. Subsequent to Gadhafi’s death, the organisation of Libya’s oil sector has become unstable. The respective authorities of the NOC are no longer clearly defined by the newly formed ministry of oil. This includes the relationship between NOC and its subsidiaries, particularly AGOCO; and the balance of power between the federal government and regional actors, especially considering the drive for greater autonomy in the oil-rich region of Cyrenaica.

The following consecutive Figures 2.3 and 2.4 show major oil producing, oil refineries, and oil storage places in Libya
Figure 1.1

Major oil producing areas in Libya

![Map of Major Oil Producing Areas in Libya](source)

Figure 1.2:

Major oil refineries and oil storage places in Libya

![Map of Major Oil Refineries and Storage Places in Libya](source)

Source: [http://www.economist.com/node/18713650](http://www.economist.com/node/18713650)

Figure 1.2 shows the proven reserves of oil in Africa.
Figure 1.3 reveals that Libya has the largest reserves of oil in Africa followed by Nigeria, Algeria, Angola, Sudan, and Egypt (Chossudovsky, 2011)

It has been persistently discussed in the previous sections that Libya is the largest oil producing country in Africa and one of the top influential countries of the Organisation of the Oil Exporting Countries (Annual statistical bulletin, 2012). Unfortunately, in spite of these facts the average oil production of Libya is persistently
decreasing representing administrative and political issues. The following table shows the historical oil extraction of Libya.

Table 1.2

Daily crude oil production (Average, 1000b)

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Algeria</td>
<td>181.1</td>
<td>1,029.1</td>
<td>1,019.9</td>
<td>783.5</td>
<td>796.0</td>
<td>1,161.6</td>
</tr>
<tr>
<td>Angola</td>
<td>1.1</td>
<td>83.9</td>
<td>150.0</td>
<td>473.8</td>
<td>736.1</td>
<td>1,618.0</td>
</tr>
<tr>
<td>Ecuador</td>
<td>7.5</td>
<td>4.1</td>
<td>204.1</td>
<td>286.1</td>
<td>392.2</td>
<td>500.3</td>
</tr>
<tr>
<td>IR Iran</td>
<td>1,067.7</td>
<td>3,829.0</td>
<td>1,467.4</td>
<td>3,135.3</td>
<td>3,661.3</td>
<td>3,576.0</td>
</tr>
<tr>
<td>Iraq</td>
<td>972.2</td>
<td>1,548.6</td>
<td>2,646.4</td>
<td>2,112.6</td>
<td>2,810.00</td>
<td>2,652.6</td>
</tr>
<tr>
<td>Kuwait</td>
<td>1,691.80</td>
<td>2,989.6</td>
<td>1,663.7</td>
<td>858.6</td>
<td>1,996.1</td>
<td>2,658.7</td>
</tr>
<tr>
<td>LIBYA</td>
<td>NA</td>
<td>3,318.0</td>
<td>1,831.6</td>
<td>1,389.1</td>
<td>1,347.2</td>
<td>489.5</td>
</tr>
<tr>
<td>Nigeria</td>
<td>17.40</td>
<td>1,083.1</td>
<td>2,058.0</td>
<td>1,726.7</td>
<td>2,053.6</td>
<td>1,974.8</td>
</tr>
<tr>
<td>Qatar</td>
<td>174.6</td>
<td>362.4</td>
<td>471.4</td>
<td>405.6</td>
<td>648.2</td>
<td>733.5</td>
</tr>
<tr>
<td>Saudi Arabia</td>
<td>1,313.50</td>
<td>3,799.1</td>
<td>9,900.5</td>
<td>6,412.5</td>
<td>8,094.5</td>
<td>9,311.0</td>
</tr>
<tr>
<td>United Arab Emirates</td>
<td>NA</td>
<td>779.6</td>
<td>1,701.9</td>
<td>1,762.6</td>
<td>2,174.7</td>
<td>2,546.6</td>
</tr>
<tr>
<td>Venezuela</td>
<td>2,846.10</td>
<td>3,708.0</td>
<td>2,165.0</td>
<td>2,135.2</td>
<td>2,891.0</td>
<td>2,880.9</td>
</tr>
<tr>
<td>OPEC</td>
<td>8,273.00</td>
<td>22,534.5</td>
<td>25,279.9</td>
<td>21,481.6</td>
<td>27,600.8</td>
<td>30,121.6</td>
</tr>
</tbody>
</table>


Table 2.2 reports the average production of crude oil of OPEC members. In 1970, the capacity of the country was 33,180,000 barrels. Subsequently, the production of crude oil has dramatically decreased to 18,316,000 barrels in 1980. The annual statistical report
(2011) of OPEC shows that the production of crude oil is 4,895,000 barrels which is only 14% as compared to 1970 average daily crude oil production.

The persistent decrease in oil production is a big question mark for the Libya (Shuping et al., 2010). Perhaps Libya is the only member country of OPEC where the production of crude oil shows persistent decreasing trend (Annual statistic bulletin, 2011). This situation can be explained in number of phenomena; political, social, technical, economic and global. Notwithstanding the other factors, political and technically deficient endogenous labour force in the oil and gas sector are the leading responsible factors for decreasing the Libyan crude oil production.

1.2 Problem Statement

Human resource practices are major factors in explaining the productivity of employees and the performance of the companies. Several studies have referred to the importance of HR practices and their roles in improving the company’s performance and productivity (Barney, 1991; Wright & McMahan, 1992; Oussama 2012; Al Damoe, 2014). Investigation and improvement in labour productivity within the oil sector is imperative for the Libyan economy to increase the total oil production and hence annual revenue from the export of petroleum products. The oil and gas sector contribute to the total export earnings to the Libyan economy by 71% in 2007 and 97% in 2009 (Mobbs, Taib, & Wallace, 2012; Ali, 2011; Salem, 2013). A major source of revenue for the Libyan economy makes the analysis of labour productivity within the oil sector indispensable to identify problems for smooth economic activities and accelerating the growth of the
sector (Hamed, 2009). Analysing the efficiencies in HR practices and their impact on labour productivity is a central question that will assist in identifying the factors causing low labour productivity in oil companies in Libya. This investigation can help in designing optimal policy agenda to stabilise production and suggest ways for further improvement the production of oil through improving HR practices and labour productivity.

Several studies have been conducted on the relationship between HRM and productivity (Barney, 1991; Wright & McMahan, 1992). The results of previous studies indicated that HRM influences productivity (Ruël and Bondarouk, 2014; Tharenou et al., 2007; Woodrow & Guest, 2014). However, these studies ignored the role of the mediating effects of social skills, which clearly refer to the absence of the causal relationship between the previous mentioned variables. Additionally, some studies have found that HRM can affect the social skills Aggarwal and Bhargava (2009); Thongsennheuang (2012) and that social skills could influence productivity (Ashkanasy, & Hartel, 2002). More recently, it has become obvious that the effectiveness of HRM as far as production is concerned heavily depends on social skills. The acquisition of social skills such as the collaboration and development of social networks has been referred to as a ‘toolbox’ of interventions in HRM. This should form part of a sound theoretical and research based understand to explain the working environment and to formulate plans of action appropriate to counter the myriad of limitations affecting labour productivity. However, this involves a clear understanding of how experiences are communicated by people and knowledge of how it effects behaviour and life situations, especially in work environments.
To a reasonable extent, understanding social skills will always be incomplete without collaboration and networking because in the realm of human experience, life is unpredictable and some uncertainty is inevitable (Tsang, 2003). Improving HRM practices and administrative skills based on the context of the current research with respect to previous evidence available is a difficult task (McGurk, Mueser, and Pascaris, 2005). Nonetheless, studies have suggested use of social skills as mediating the relationship between HRM practices and administrative skills (Tharenou et al., 2007, Baron & Kenny’s 1986). Therefore, this study assumes that social skills mediates between HR practices and labour productivity.

Increase in total expenditures often mask cost inefficiencies of up to one third of the increase in opex and capex costs per category. Among the various hypotheses put forward to explain these trends, the most robust seems to be that higher output prices have suppressed productivity growth through two effects: increased exploitation of low-productivity marginal deposits, and business decisions based on profitability rather than productivity. Despite the rapid decline in productivity in oil and gas extraction, it is not necessarily true that Libyans are worse off.

Analysis of aggregate productivity growth has shown that a substantial fraction of the change in industry productivity is due to reallocation of output from lower productivity plants to those with higher productivity - i.e. it is not simply incumbent plants becoming more productive. This reallocation effect is partly due to the shift in market share between incumbents and partly due to the effects of exit and entry.
Bartelsman, Haltiwanger and Scarpetta (2008) show that the speed of reallocation is much stronger in some countries (like the US) than others. There is also significant sectoral variation. For example, Foster, Krizan and Haltiwanger, (2006), show that reallocation between stores accounts for almost all aggregate productivity growth in the US retail sector.

HRM practice research has traditionally had an individual-level focus; in contrast, SHRM research is typically conducted at the business-unit or organizational level of analysis. Reflecting this orientation, recent HR research has focused on high-performance work systems, a term used to denote a system of HR practices designed to enhance employees’ skills, commitment, and productivity in such a way that employees become a source of sustainable competitive advantage. A number of studies have revealed links between greater use of these types of practices and labor productivity (Guthrie, 2001; Datta & Guthrie, 2005).

Investigating the reasons for failure to achieve organisational goals and to explain the low oil production of Libyan oil companies with respect to human resource practices through the mediating effect of social skills will help pinpoint the factors adversely affecting labour productivity. This may be due to a mismatch between employee qualification, experience, competence, and their corresponding job requirements. To enhance labour productivity in Libya requires a careful integration of social skills as well as strategic implementation of the key HRM practices especially staffing, on-the-job training, decentralised decisions, and employee motivation that contribute towards enhancing labour productivity.
1.3 Research Questions

Based upon the problems identified, the study raises some research questions requiring a solution. Some important questions are:

1. What is the relationship between HRM practices and labour productivity?
2. What is the relationship between HRM practices and social skills?
3. What is the relationship between social skills and labour productivity?
4. Does social skills mediate the relationship between HRM practices and labour productivity?

1.4 Research Objectives

The general objective of the study is to investigate labour productivity with respect to HRM practices, demographic characteristics, and social skills of employees working in the oil and gas industry in Libya. The specific objectives of the study are:

1. To examine the relationship between HRM practices and labour productivity.
2. To investigate the relationship between HRM practices and social skills.
3. To investigate the relationship between social skills and labour productivity.
4. To investigate the mediating role of social skills for the relationship between HRM practices and labour productivity.
1.5 A Brief Explanation on Libyan Oil Companies

Since 1999, Libya has been transformed by aligning itself according to the requirements and expectations of the industrial nations of the world and has, therefore, in this process of transformation, already become one of the competitive nations in the petroleum sector. Libya's oil industry is run by the state-owned National Oil Corporation (NOC), along with subsidiary companies, which, all taken together, account for around half of the country's oil output. NOC was established on 12th November 1970, under Law No: 24/1970, to assume the responsibility of the oil sector operations. NOC carries out exploration and production operations through its own affiliated companies. NOC also participates with other companies under service contracts or any other kind of petroleum investment agreements (National Oil Corporation, 2005).

Of NOC’s subsidiaries, the largest oil producers are the Arabian Gulf Oil Company (AGOCO) and Waha Oil Company (WOC). AGOCO oil production is coming mainly from the Sarir, Nafoora, and Messla fields. AGOCO’s production was estimated by NOC at around 430,000 bbl/y in 2003. WOC was created in 1986 to take over operations from Oasis Oil Company, a joint venture of NOC 59.16 percent, Conoco 16.33 percent, Marathon 16.33 percent, and Amerada Hess 8.16 percent. WOC is among the Libyan companies that were affected by the US embargo. This is due to the fact that its oilfields are equipped mainly with old US equipment, for which WOC cannot acquire needed spare parts. As a result, production at WOC has fallen sharply, from about 1 million bbl/d at its peak in the late 1980s to around 300,000 bbl/d in 2002 (Farhad et al. 2000).
AGOCO was the first oil company that is completely owned by NOC after the nationalization decisions. It is one of the biggest oil companies in Libya and also stands as one of the largest oil companies in North Africa. AGOCO was established in 1971, as a result of nationalization of the British Petroleum Company (BP) shares, under law (115/71). AGOCO operates five major oil fields i.e., Sarir, Messla, Naffora, Beda and Hammada. The company also operates an oil terminal and a refinery in Tobruk and Sarir. SOC operates the Raguba field in the central part of the Sirte Basin. SOC is also in Charge of two other gas fields (Attahadi and Assumud) plus the Marsa el-Brega liquefied natural gas (LNG) plant.

The population for this study is nine (9) government owned oil companies working under the national NOC.

i. Arabian Gulf Oil Company (AGOCO)

ii. Waha Oil Company (Oasis)

iii. Repsol and Akakus Oil Operations

iv. EniandMellitah Oil and Gas

v. Wintershall

vi. Sirte Oil Company

vii. Total and Mabruk Oil Operations

viii. Occidental, OMV, and Zueitina

ix. MedcoEnergi.

Below table shows the production output of the Libyan oil companies that contribute for the GDP growth of the country.
Table 1.3

Production output by Libyan oil companies

<table>
<thead>
<tr>
<th>Company</th>
<th>Production in 2006</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arabian Gulf Oil Company</td>
<td>436</td>
<td>24.76</td>
</tr>
<tr>
<td>Waha Oil Company</td>
<td>340</td>
<td>19.31</td>
</tr>
<tr>
<td>Eni</td>
<td>286</td>
<td>16.24</td>
</tr>
<tr>
<td>Repsol</td>
<td>256</td>
<td>14.54</td>
</tr>
<tr>
<td>Sirt Oil Company</td>
<td>101</td>
<td>5.74</td>
</tr>
<tr>
<td>Wintershell</td>
<td>112</td>
<td>6.36</td>
</tr>
<tr>
<td>Veba Oil Operations</td>
<td>97</td>
<td>5.51</td>
</tr>
<tr>
<td>Zuietina Oil Company</td>
<td>60</td>
<td>3.41</td>
</tr>
<tr>
<td>Other Companies</td>
<td>73</td>
<td>4.15</td>
</tr>
<tr>
<td>Total</td>
<td>1761</td>
<td>100</td>
</tr>
</tbody>
</table>

According to the study performed by Fattouh and Darbouche (2010), Arabian Gulf Oil Company (AGOCO), Waha Oil Company (WOC) and Sirte Oil Company (SOC) are the most integrated industries confirming the Libyan oil output of almost 80% of production from these companies. The Arabian Gulf Oil Company an exploration company in which the shares of the British petroleum company (BP) were nationalized in concession no. 65 covering the Sarir field; Sirte Oil Company (SOC) is the most integrated and one of the largest operating subsidiaries of the National Oil Corporation of Libya. SOC contribute around 35% of the total contribution as companies like (Eni and Repsol) are the subsidiary companies of SOC. This these three companies (AGOCO, WOC and SOC) were selected for the study conducting on HRM practices and labour productivity.
a. **Waha Oil Company (WOC)**

Waha Oil Company is one of the main national companies involved in the extraction of oil and gas. The company was amalgamated in 1955, when the Oasis Oil Company was incorporated as an operator for three American companies (Mobbs 2001). The company initiated its operation in 1956 and got access to oil and gas across Libya. The company discovered oil and started commercial operations in the North Bahi oilfield. Subsequently, the company discovered many new fields of oil across different regions. The company discovered, Waha and Defa oilfields in 1960, Gialo and Samah oilfields in 1961, Zaggut, Belhedan, Khalifa, Balat, Masrab, Harash and al-Faregh oilfields in 1962.

The Waha oil company contains American firms ConocoPhillips, Marathon, and Hess in partnership with the National Oil Corporation (NOC). The company can produce/extract approximately 350 thousand barrels per day. The company operates four main fields:

1. Waha
2. Gialo
3. Dahra
4. Samah

The political turmoil in early 2011 drastically reduced oil production in Libya. In late 2011, the new political set up in the country struggled to restore the situation and reopen the companies to produce oil and gas. Waha-operated fields were among the last
to restart in late 2011 and early 2012 (Chami, Al-Darwish, and Cevik, 2012; Mahmud and Russell, 2002). The production was quickly restored and progressed towards its optimal level. The current production of the company is around 300 thousand barrel per day (bl/d). Projects in the Waha pipeline include North Gialo and NC-98.

a. The Arabian Gulf Oil Company (AGOCO)

The Arabian Gulf Oil Company (AGOCO) was established in Benghazi. The company produces crude oil and exports natural gas. It was a subsidiary of the state-owned National Oil Corporation (Mobbs et al., 2012). The National Oil Corporation (NOC) established AGOCO in 1979 to assist Nelson Bunker Hunt of the United States. The AGOCO is working across seven major oilfields:

i. Sarir

ii. Messla

iii. Nafoora

iv. Beda

v. Hammada

vi. Tobruk

vii. Sarir

During the 2011 revolution, the functions of AGOCO remained a key centre in the eastern area of Cyrenaica. AGOCO has a capacity of approximately 400 thousand barrels per day; the largest of any foreign or domestic oil company in Libya. There are still many
obstacles preventing the company from reaching its full capacity. The major obstacle to full production includes technical problems related to pumps and power supplies.

The Sarir field, which is a major oilfield of AGOCO, was exposed in the Sirte Basin in 1961. This field is the largest country field (Mahmud and Russell, 2002). The Messla field, discovered in 1971, is also one of the largest fields in the Sirte Basin. The Nafoora field was discovered in early 1965. The Beda and Hamada fields were discovered in 1959. Beda and Hamada are dead fields which require the use of new technology to recover the oil. The production capacity of AGOCO was estimated by NOC at around 430 thousand barrels per day in 2003. In 2010, AGOCO coproduction capacity was around 400 barrels per day, representing approximately 25% of total Libyan crude oil production (Ahlbrandt, 2010; Ahlbrandt, 2002). In May 2012, the production of the company reached an estimated 350 thousand barrel per day. The major obstacles to full extraction of oil include technical problems related to pumps and power supplies.

b. Sirte Oil Company (SOC)
First known as Esso Standard Libya Inc., Sirte Oil Company (SOC) was the first company to discover commercial crude oil in the Zelten oilfield. In 1981, the Sirte Oil Company was formed as a NOC subsidiary. In 1986, SOC took over the assets of Grace Petroleum, one of the five U.S. companies forced by the US government to leave Libya. In 1991, SOC merged with the National Petrochemical Company, creating the Sirte Oil Company for production, manufacturing of oil and gas. The major activities of the company are oil refining and liquefying natural gas and petrochemicals.
The SOC operates the Raguba field in the central Sirte Basin. The company is located in Marsa El Brega. One of the greatest successes after the removal of the foreign partner and the occupation by the national management was the allowance of SOC’s activity to include offshore discovery. These activities were honoured in 1983 with two important oil and gas discoveries in regional waters. Thus, the SOC also operate offshore.

In 1991, the National Petrochemical Company was merged with SOC to form the Sirte Oil Company for production and manufacturing of oil and gas. Thus, the manufacturing activity began to include refining crude oil, liquefaction of natural gas, and the manufacturing of petrochemicals such as Methanol, Ammonia, and Urea. The SOC has the following important fields:

i. Nasser (Zelten)
ii. Raguba
iii. Raguba
iv. Lehib (DorMarada)
v. Jebel
vi. Wadi
vii. Ralah
viii. Arshad
ix. AinJerbi
x. Al Wafa
Table 1.4 provides basic information about the selected companies

Table 1.4

<table>
<thead>
<tr>
<th>Company</th>
<th>Waha oil company</th>
<th>The Arabian Gulf Oil Company</th>
<th>Sirte Oil Company</th>
</tr>
</thead>
<tbody>
<tr>
<td>Industry</td>
<td>Petroleum</td>
<td>Petroleum</td>
<td>Petroleum</td>
</tr>
<tr>
<td>Products</td>
<td>Oil and Gas</td>
<td>Oil and Gas</td>
<td>Oil and Gas</td>
</tr>
<tr>
<td>Employee</td>
<td>3200</td>
<td>2400</td>
<td>6652</td>
</tr>
<tr>
<td>Status</td>
<td>Government owned</td>
<td>Government owned</td>
<td>Government owned</td>
</tr>
<tr>
<td>Year of establishment</td>
<td>1956</td>
<td>1979</td>
<td>1981</td>
</tr>
<tr>
<td>Headquarter</td>
<td>Tripoli</td>
<td>Benghazi</td>
<td>Brega</td>
</tr>
</tbody>
</table>

The success of Libya’s 2011 revolution has given way to political disarray, an institutional vacuum, and an extraordinary proliferation of non-state and quasi-state armed groups operating across the country. However, rather than pursuing political or ideological objectives, these groups increasingly focus on resource predation. Series of incidents in early 2012 signalled the emergence of new types of violence in Libya and marked the beginning of a phase of conflict characterised by territorial ambitions, resource predation and the eradication of opponents (Lacher, 2014). The companies sampled in this study are the leading government linked organisations under the control of the National Oil Corporation (NOC). The companies will directly benefit from the
outcome of this study. The selected companies contributed 80% of the oil market demand.

1.6 Research Significance

This study is important for many reasons. The following are a few of those reasons:

1. This is a well-documented evidence that the Libyan economy is highly hydrocarbon dominated export economy (Ahlbrandt, 2010; Chami et al., 2012; Outlook, 2013). Investigating reductions in oil production through the investigation of labour productivity is an important tool to reveal what factors and to what extant this important sector is suffering from the lack of well-established HRM practices.

2. As the crude oil production in Libya is decreasing while the crude oil reserve of the country is increasing, decreased productions would ostensibly be a productivity issue. The labour productivity analysis will help understand whether labour productivity is up to standard. It will also help identify the sources of inefficiencies of these companies.

3. This study will help decompose the sources of labour inefficiency in terms of HR practices and characteristics. This information may further help in the design of optimal policy agenda to enhance labour productivity.

4. The significance of the study in terms of applied research is to investigate the causes of low productivity of labour to help design a national reform agenda.

5. The beneficiaries of this study are three major stakeholders: the National Oil Corporation, the oil and gas producing companies, and the government of Libya.
This study and its implications are directly related to the oil companies, government of Libya, and National Oil Corporations. The study can help identify problems in terms of progressive HR practices directly related to the oil producing companies. The implications of the study are equally beneficial to all stakeholders.

1.7 Limitations of the Study

1. Labour productivity is the focus of this study, especially in the Libyan oil and gas sector. Below are the three main Libyan government owned oil companies selected for the investigation.
   
i. Waha Oil Company (WOC)
   
ii. Arabian Gulf Oil Company (AGOCO)
   
iii. Sirte Oil Company (SOC)

These are the leading government owned oil companies working under the National Oil Commission (NOC) of Libya. The selected companies represent 80% of the total oil sector output. The companies have been deliberately selected from the following list of companies.

2. As the study is cross-sectional in nature (meaning that the information from the employees will be taken once in a single point in time), no good and direct indicators are available for organisational outcome which can be measured in the cross-sectional context except the perceptions of employees regarding labour productivity. A lack of cross-sectional data indicators likely requires a reliability on perception study.
3. There is a paucity of studies explaining labour productivity and the relationship between HRM process and organisational objectives in a cross-sectional context for Libyan oil producing companies. To date, no such study investigating HRM practices and labour productivity issues have been addressed.

The oil sector is important in terms of revenue generation and a major source of foreign exchange reserve, but decreasing oil production has posed economic challenges. Thus, there is a need to identify the reasons for this deficiency and design an optimal policy agenda for optimal oil extraction (Mahmud and Russell, 2002; Outlook, 2013).

No previous study address this national issue in the HR context. This study is designed to investigate labour productivity as a measure of organisational performance with respect to human resource practices and to employees’ characteristics. Investigating the reasons for a lack of organisational goals and the low oil production within employees’ characteristics and progressive human resource practices will help pinpoint the reasons which adversely affect labour productivity. It is thus believed that there is a mismatch between employee qualification, experience, skills, and their corresponding job requirements.

1.8 Operational Definitions

The concept of HRM has attracted enormous attention and has stimulated significant debate between academicians and practitioners. Much of the discussion has been around the meaning of HRM, yet there is no single universally accepted definition of the concept. Below are the operational definitions for the variables considered for the study.
Labour Productivity

Labour productivity is defined as the new ideas that are appreciated by the organisation for producing the amount of goods and services. Specifically, the amount of quality and quantity product produced by the labour is defined as labour productivity (Alaghi, 2012).

HRM practices

Tan and Nasurdin (2011) defined HRM practices as, “a structure that attracts, develops, motivates and retain employees to ensure the implementation and survival of the organisation effectively”.

Staffing

Staffing is defined as, “The process of attracting, selecting, and retaining individual employees to achieve their organisational objectives” (Ployhart, 2006).

On-the-job training

“An approach to offer the opportunity for learning of skills through the work experience. Furthermore, it is a form of directed experience” (Needham and Dransfield, 1994).
Employee motivation

“The willingness to exert high levels of effort towards organisational objectives, conditioned by the efforts ability to satisfy some individual requirements” (Johnson, 2005; Rainlall, 2004).

Decentralised decisions

Decentralisation is defined as “transfer of authority, or dispersal of power in planning, management and decision making from one level to the other” (Athanasiadis et al., 2015).

Social skills

Set of skills that is used by individual to interact and communicate with other individuals (Beheshtifar and Norozy, 2013).

Collaboration

The process of reaching objectives that cannot be achieved by one single agent on a set of common objectives and directions by sharing responsibility (Lai, 2011).

Networking

A set of services accomplishing communication between two individuals using an socio-economic activity by making people recognize, realize, create or act upon business opportunities (Sullivan Mort, G., & Weerawardena2006).
1.9 Chapter Outline

The first chapter highlights the introduction to the problem, its background, and the research questions and objectives. The chapter further introduces the sample of the study, significance of the research, limitation and importance of the study. Chapter 2 reviews the relevant literature and explores definitions of various concepts and their measurements and relationships with other variables. The chapter then introduces the underpinning theories and conceptual framework. The chapter introduces a set of independent variables to establish a relationship with the dependent variable. Chapter 3 introduces the research concepts and methodology adopted in the study, starting with the research approach and design of the study. The chapter then introduces the statistical analysis between the constructs. The chapter also introduces sampling techniques and data collection approaches and analysis. Chapter 4 provides statistical results for the study and the last chapter 5 discusses the findings of the study in depth by comparing the study’s findings with previous works, and by relating them to the relevant theory cited in the second chapter. In addition, limitations of the present study and recommendations for practice and future research is addressed in this chapter.

1.10 Chapter Summary

Libya is a big country in terms of proven oil reserves in sub-Saharan Africa and has an influential status among the Organisation of the Oil Exporting Countries (OPEC). The extraction capacity for oil and gas of the country is not efficient and thus the country’s export earning in lesser compared to the early 1970s. The Libyan economy is at the mercy
of earnings from hydrocarbons export. The export of oil earns approximately 95% of Libya’s total export earnings, 75% of government earnings, and 25% of its GDP before the political unrest of 2011. Finding a solution to this is extremely important considering that the Libyan hydrocarbon sector contributes 95% of the total sales revenue for Libya. Thus, the main objective of this study is to detect and reduce hurdles related to human resource practices that influences productivity. HR practices like selection of staff, enrolment and retention policies, motivation of employees, and power of decision making have high impacts on labour productivity in the oil and gas industry of Libya.

Investigating the reduction of oil production by investigating labour productivity is important to reveal what factors and to what extant this important sector is affected by a lacking of well-established HR practices and employees’ characteristics.