Contribution of Oil and Gas Value Chain to Human Resource Value; an examination of local content policies in Oman

Abstract

This research addresses the important issue of localisation policies and local content frameworks, with focus on Oil based economies and in particular Oil and Gas (O&G) value chain, and how they influence economic diversification strategies through contribution to the development of local human resources and job creation for future. This research specifically examines the case of Oman Sultanate and seeks to address the human resource aspects that limit the successful implementation of the state's localization strategy, namely In-Country Value (ICV), in the oil and gas sector of the country. The research explores these issues through an examination of existing studies as well as field study of Oman's O&G industry. The paper attempts to identify existing demand and supply gaps within the industry to contribute to our understanding of plausible measures and solutions for addressing the increasing demand for skills along the value chain of the oil and gas sector.

Based on the findings the study highlights certain necessary factors to bridge the gaps in implementing the policies and in practicing the Human Resource Development within organizations. Human resource development should be structured by private and public sector organizations in such a way which will produce well-trained professionals who will have the knowledge to strengthen cost-effectiveness in production. The government as well as the public enterprises should develop means to thrive innovation and creativity within the workforce, besides providing financial and security benefits. The private enterprises need to provide job security to the nationals to encourage them to prefer the sector just as they are interested in working for the government. To succeed in their policies and add real value to the economic domain, it is important for the government to further their efforts in introducing policies for diversification of workforces, particularly providing women and people with disabilities equal opportunities to project their potential and skills.

Track 16: Operations, Logistics and Supply Chain Management

Keywords: Oil and Gas Value Chain, Human Resource Development, Local Content Policies, Economic Development

Introduction

Abundance of oil resources has enabled countries in the Middle East to achieve economic progress, especially in the 21st century. Access to such rich wealth has however been seen and experienced through the time to have had mixed blessing for such countries (Frankel, 2012; Papyrakis and Gerlagh, 2004). On the other hand the reality that the sources of reserves will eventually be depleted (Hvidt, 2013), has attracted attentions in oil-rich countries where governments are making attempts to diversify their economic activities to offset the potential effects of a diminishing natural resource (Hvidt, 2013). Esfahani, Mohaddes and Pesaran (2012) show that oil income impact can only be critical to economic growth if the oil income is greater than the population growth and technological progress, hence outpaces the population factors. It is therefore important for oil-rich countries to keep population factors including employment in check so that the resources generated by the oil sector can keep pace.

Within the global context, competition continues along with dynamic market mechanisms which require business organizations to be more flexible in dealing with the transformations

taking place in the global business landscape (Fahdi and Swailes, 2009). Human capital in particular has become increasingly essential in gaining competitive advantage for business firms, and consequently as one of the most valuable assets of most economies. According to Sen (1999), development is the enlargement of the human set of capabilities as well as the set of choices people are allowed to have. The Human Capital Theory (HCT) is concerned with the development and wellbeing of an economy's human capital. Human capital is defined as the productive wealth of an entity that encompasses labour, skills, and knowledge (OECD, 2001). Recognizing human capital as a source of their competitive advantage, most organizations strive to optimize their efforts in developing their human resource values through maximizing job suitability and satisfaction, and quality of work (Smith, 2005).

Of strategies adopted, mainly in natural resource dependent economies, to augment the effects of natural resources and utilise them to the long term benefit of the economies has been the "local content policy" (Lahiri and Ono, 2003). Technology transfer, local employment opportunities, backward and forward integration, and increased ownership and control of firms are indicated as the main objective of such policies (Lahiri and Ono, 2003). Integrating a local content policy within economic development framework has however its challenges for countries adopting the policy, including dependence upon the regulatory frameworks in place to optimize value creation within the value chain of extractive industries such as energy sector. Such processes occur among companies operating in the host as well as the home country, and with their consumers. Local content policies can have an impact on the distribution of value along the production chain, as well as the global value chain itself. Consequently, stakeholders may consider local content policy as a determining factor in making their investment decisions that could also prove to be critical in the formulation of public policies aligned with development goals of the country. The local content policy or localization of human resources makes it compelling for organizations of today to recognize the importance of human resource management (HRM) in bringing organizational stability and sustainability (Myloni, et al., 2004).

As one of the oil rich countries in the Middle East, Oman has been economically dependent on oil and gas as a major source of its revenues for a long time. The Omani government has recognized this reality and has been implementing a number of programs to help diversify its development goals. The implementation of ICV, together with the country's Local Workforce Development Programme have defined a curriculum that sets the required skills and standards not only within the oil and gas industry but also within other sectors. While other studies have accounted for various factors that limit the growth of ICV opportunities in the oil and gas sector (Dynes, 2011; Adepetun, 2010; Munson and Rosenblatt, 1997), this research specifically seeks to address the human resource aspects that limit the successful implementation of ICV in the oil and gas sector of Oman. Within the local content framework, the focus of this research is to evaluate how the oil and gas value chain and local content play a vital role in job creation for future, and also to evaluate if the country has necessary resources to achieve its ICV objectives on the HR front. Specifically, this study explores the extent of human resource values established within the economic development framework of Oman. The study examines current trends occurring within the sector that can have an impact on the local demand and supply of human capital within the industry. The research sheds light on employment gaps and presents a critical evaluation of the ICV policy.

Literature Review

Economic Development in Oil Rich Economies

Indicators from World Bank data have shown that countries that depend largely on one or a few commodities such as oil and gas are more likely to fall into several problems detrimental to their economy including corruption, underdevelopment, poverty and domestic conflicts (Collier, 2000; Papyrakis and Gerlagh, 2004).

Economic development of most of the oil rich economies is highly dependent on their oil revenues as it becomes the major source of income generation (Oxford Business Group, 2012). Countries especially within the Middle East region, considered to be oil rich, have experienced some considerable degree of growth and development marking their strong presence in international arena (Hertog, 2010). A study by Mina (2007) showed that mainly it is the oil and its related facets that affect the flow of Foreign Direct Investment (FDI) in these oil rich nations. The study revealed that while higher oil reserves and manufacturing attracted higher FDI resulting in positive economic development, fluctuations in its prices and consumption levels adversely affected the same.

Studies in the same time point to the risks of becoming overly dependent on oil reserves in these countries and highlight the need for seeking other sources such as economic diversification and technology transfer from developed states to support their economic development (Hvidt, 2013; Colombo, 2014). Cammett et al. (2015) find development in many oil rich states to be uneven evident from disparity in per capita income of these nations. Thus economic development and structural changes in these nations are varied which makes it difficult to determine whether oil rich countries are dependent on oil reserves for economic development.

Policy Intervention; Localization

Local content strategy has been devised and implemented in many emerging economies since 1970s. Countries including Australia, Canada, Spain, Brazil and China have recorded some successful stories in this regard (see Veloso, 2006; Ado, 2013; Hao et al., 2010).

Localization has been a very strong initiative pursued by the government of Oman through its approach "Omanization". Al-Shanfari (2012) confirms that through this policy the government intervenes the local markets related to labor and have been trying to assimilate regional labour force in Oman in both private and public sectors. In the case of Oman, the need was seen for continuation of the efforts exerted to upgrade and enhance the efficiency of the State's administrative apparatus and control of its performance. Special attention was paid to population and sustainable human development issues, social care and enhancing women's participation in conformity with economic growth and with continued sensitivity to Omani culture. Development of small and medium-sized enterprises is achieved by means of providing them with financial, technical and administrative support (Al-Shanfari, 2012). The concept of 'localization' has been further broadened to go beyond employment of locals in the Oil and Gas sector. The new definition of localization, now known as In-country value (ICV), is empowering every link of the Oil and Gas value chain; that is, from the local machine shops producing nuts and bolts to training and in taking in the right employees for the upstream and downstream sectors, thus giving back value to the country. In another definition, localization may also be defined as within the industry as "The total spend retained In-Country that benefits business development, contributes to human capability development and stimulates productivity in Oman's economy" (Ministry of Oil and Gas, n.d.) (i.e. goods made and services provided by Omani nationals themselves in their home country which is Oman).

Goodliffe (2005) specified that Oman Ministry of National Economy through its Vision 2020 policy approach had promoted localization policy very strongly. It was quoted that "*The Vision*"

for human resources involves: creation of well-developed Omani human resources with capacities and skills that conform with the technical and technological development and characterized by high efficiency for management of changes" (Goodliffe 2005, p: 2). Donn and Issan (2007) brought to light that this policy intervention was first proposed and implemented under the Third National Development Plan 1980-1985 of Oman but major initiatives were pursued from 6th National Development Plan 2001-2005. Figure 1 shows a projection of human resources in these plans. This was also confirmed by Gonzalez et al. (2008).

NO.	INDICATORS	1995	2020
1	Manpower:		
	i) Percentage of males in labour force to total population;	17%	50%
	ii) Percentage of females in total labour force	6%	12%
	Total	23%	62%
2	Omanization:		
	i) Omanization rate in Public Sector	68%	95%
	ii) Omanization in Private Sector	15%	75%

Figure 1. Estimates of Workforce in 2020 in Oman, Source: Donn and Issan (2007)

Along with strengthening educational system, these policy interventions were also directed to minimize the gender inequality persistent within Omani society. Some of the major policy drives that supported localization in Oman were expansion of private education systems and designing programs to curb illiteracy. A strong step towards localization or Omanization was increasing mandatory intake of Omani people for jobs in both private and public sector organizations. Policies with regards to increasing compensation and providing benefits to job security for attracting higher number of Omani nationals in both the sectors especially private sector was also practised (Donn and Issan, 2007).

The localization policy of the Omani government is an effort to lessen the dependency on the oil and gas sector and to use the benefits and resources of the oil and gas sector to build on other industries and services and to generally diversify the Omani economy. This includes the possibilities of creating and stabilizing employment, as well as establishing human resource values within the value chain and all throughout the Omani economy. It is necessary to understand the current gaps in the Omani economy and the problems that the policies are trying to rectify.

Human resource development to aid Omanization

Marshall (1920) had maintained that the most valuable type of capital is the one that is invested in a country's own people. Human Capital Theory denotes any stock of knowledge, either innate or acquired, that a person is able to contribute to his economic productivity (Garibaldi, 2006). Fundamentally, the theory views education as an investment because it increases the productivity and earning capacity of an individual (Garibaldi, 2006). From a macro-level point of view, educational investment is a crucial element of a country's economic growth.

Omanization has been to a large extent supported by human resource development initiatives by the government of Oman in order to ensure augmentation of competencies of its people. With a series of policies and dedicated efforts the government pursued Omanization approach for augmenting skills and competencies of its people across all job profiles and genders along with dealing with social care issues (Al-Shafrani, 2012). The drive for Omanization aimed at creating a workforce with a strong knowledge base that would not only support economic development of the nation but also assist in reaping benefits of globalization as specified by Donn and Issan (2007). Funding of quality education by the government has also been a strong initiative under Omanization for developing human resources. This quality education is

provided in multiple fields ranging from computer sciences to engineering and from commerce and business to medicine and pharmacy. However as determined by Donn and Issan (2007) the primary focus of all education and human resource development program has been primarily on development of English language capabilities through a varied portfolio of courses (e.g., a transition from Grade 4 to Grade 1 level English was made in educational institutes to lieu to support this program).

Gonzalez et al. (2008) stated that the Oman Ministry of National Economy in order to develop its human resources pursued different programs wherein educational curriculum were overhauled to support creation of human capital. Varied vocational training opportunities was also created for Omani people which was further arranged in line with those provided by private sectors in order to promote Omanization in private sector also. These human resources development approaches were pursued considering swift technological changes thus keeping educational and training programs abreast with the same. Al-Shanfari (2012) specified that under such drive for developing human resources, approaches to promote leadership and entrepreneurial skills were pursued through the 'SANAD' (which translates to 'Support' in English) program. Human resources were developed to promote youth to take up entrepreneurial business at micro level by providing them with necessary training and related qualifications.

The Omani government has shown concern towards the challenges it has to face in the 21st century such as declining oil reserves and growing youth population. Several interrelated approaches have been pursued by the state's leadership to develop the human capital of the economy including changing the educational curriculum and structure of the country by promoting the creation of private universities and colleges. The government also went about creating more vocational training opportunities and aligned vocational training to the specific needs of the private sector. It also went about diversifying its economic activities and immersed itself to privatizing its labour market. Interestingly most of the approaches undertaken relate to the challenges pertaining to the educational system where several transformations were needed. On the same note, the government also moves towards addressing the issues in its labour market by broadening its economy through diversified activities. However, oil and gas still remains as its primary industry. The Ministry of National Economy of Oman has explicitly declared that the development of the country's human resources and the upgrading of skills of the Omanis as priorities to keep abreast of the technological changes (Oman Ministry of National Economy, 2005). The government's goal is therefore set to enable the Omani youth to meet the demands and fill in new employment opportunities and substitute expatriates, as they are being prepared to participate in establishing knowledge economy and better enhance their quality of life (Oman Ministry of National Economy, 2005). Records show that trainings have been conducted in a number of different skills areas among 36,020 Omanis: the skill areas include semi-skilled work (17,556), managerial positions and engineers (7,154); technician trainings (4390); unskilled workers (3,622); 3347 Supervisors; Operators (3,237); and Inspectors (1,195) (Sultanate of Oman, 2013).

The aforementioned strategic objectives set by Oman pointed towards the development of its human resources manifests the confidence of the Sultanate that in achieving such objectives, the help of other government bodies is equally essential in the implementation local content polices that will make a significant contribution to achieve the country's economic goals through best practices and raising HR standards (Looney, 1990). Consequently other organizations will also be benefitted apart from those belonging only to the oil and gas sector while each of these organizations has its own growth and sustainability plans. This includes the implementation of its expatriates succession plans, and investment that have to be made in training and education programs specifically designed to equip Omanis and raise their levels at par with foreign workers or expatriates. Having these initiatives will have a tendency to

increase the competency levels of the local workforce that would result to higher productivity among all levels from the technical (junior) to the middle and to the highest positions in the organization (Myloni, et al., 2004).

Challenges of Omanisation in Oil and Gas value chain

Previous studies have uncovered the challenges plaguing the oil and gas sector in Oman in comparison to the other gas and oil industries in the Middle East region and worldwide. Al Shanfari (2012) in their research have summarized these challenges as: (1) The nascent state of Omani industrial sector, which limits opportunities for local industrial participation in the oil and gas sector; (2) limited technical capabilities both at the individual and firm levels capping value added potentials of local firms and workers; (3) lack of coordination at the national level of activities intended to develop the oil and gas cluster; (4) insufficiency of having an entrepreneurial culture and that could translate into the development of skills among Omanis on the supply and demand side; (5) regulatory and administrative issues; (6) limited access to capital for small and medium enterprises (SME's) along with (6) uncoordinated SME support efforts; and (7) lack of education and training among its human resources. These studies also suggest that the creation of goods and services within the oil and gas sector in Oman could also bring social and economic benefits to other industries in Oman (Kumar, 2010). Thus, to achieve these major transformations, the need to develop industrial capabilities, education and higher skills, entrepreneurial support, as well as gaining a strong support from the government and its agencies are considered as essentials (International Labour Office (ILO), 2000) to achieve the main goal of the ICV initiative.

The present scenario based on the World Bank "Doing Business" report in 2013 has, however, indicated that only 14% of the population comprises the workforce within the country's private sector. Back in 2013 the target percentage of Omanization in the private sector was already expected to improve. Whereas in its financial sector at 82.1%; electricity and distribution sectors at 75.7%, communications, storage and transportations sector at 32%, whereas in the trading sector at 7.5%. Finally, the target for the manufacturing and construction sector was at 11% and 8% respectively (Oman Observer, 2013). The low representation of Omanis in the private sector is alarming and it is necessary to take measures to address the problem. Part of the problem is a lack of the necessary skills. There are not enough Omani citizens with the skills that are demanded of private sector employers thereby leading to low opportunities for the locals. Another reason could be the differences in human resource management inputs between the public and private sectors. Most Omani citizens seek public sector employment over private sector employment.

The focus of the present research is the Oil and Gas value chain, wherein, according to a study by government (2013) showed that this sector currently employs 55,000 people, of which 22,369 are Omanis which means 40.7% Omanization. The figure aforementioned indicates its composition made up of direct and indirect work force, creating positive benefits out of the investments made by the government to this sector. The oil and gas sector in Oman does not however, guarantee continuous employment in the future since the supply or reserve of the natural resource can reach a depleted stage. This realization has long been recognized by the Government, and it is the motivation behind the government's concern to diversify economic activities and opening trade barriers not only within, as well as beyond the national borders of Oman. Although there is currently a strong potential for the oil and gas sector to fuel economic growth, the supply will eventually end and thus the government is looking for ways to take advantage of the value chain for oil and gas. The oil and gas sector becomes interconnected with the political and regulatory framework of the country (Weijermars, 2010). It is therefore important to study the impact of the oil and gas sector on human resource development in Oman over the last few decades.

Research Objectives and Methodology

Objectives

The research aims to uncover how the Omani government would be able to create and enhance the implementation of a local content policy that envisions a skilled workforce and an investment-friendly economy that is conducive to the achievement of a sustainable economic growth and development. While local content has been a major concern in the oil and gas projects undertaken by emerging economies, there is inadequate information regarding how local content can work not only for the oil and gas sector but also for the whole economy especially when the goal of the economy is to remove its dependence on oil revenues. This research therefore intends to present a general outlook of how the value chain for the oil and gas sector works, and how local content can be integrated within the chain to aid in the creation of human resource value in the economy of Oman. The study attempts to understand the gaps that are present in the development of human resources and how government initiatives can bridge the gap to the advantage of the aggregate economy. This includes an evaluation of the incorporation of such policies and programs within the value chains within the various spheres of the Omani economy in terms of creating and adding human resource values in different economic domains. The research would also reflect on possible areas need to be developed in the process of localization and implementation of the ICV policy to enable the country to attain a sustainable economic growth and development.

Methodology

The research methodology for this study has been based upon a mixed method, which is a combination of quantitative and qualitative analysis to pursue a comprehensive study of the raised questions and concerns. An inductive research approach with a triangulated research strategy has been used to successfully realize research objectives. The field study was designed to take place in two complementing stages. A survey of functional staff and middle managers in the O&G value chain is administered first to collect first-hand information from the people operating and leading activities in the industry's value chain. Knowledge gathered from this stage is then fed into the design of a qualitative study through interviewing executive and strategic management and leadership figures of the O&G and other relevant institutions to explore strategic and policy related aspects of the issues in concern.

Field study design

Two stages were designed to acquire the required data and knowledge from the field:

Survey of O&G workforce

For this stage junior and middle level management of O&G value chain in Oman was targeted. The major workforce in Oman comprised of people belonging to junior and middle level employees who were selected for conducting survey and collecting information accordingly. The probability of this section to actively participate in survey was relatively higher, and hence was considered to be the ideal profile for respondents. For this purpose a random selection of the target population was adopted in which a total of 500 respondents were approached using the database available for the sector. Questionnaires was posted online and invitations were sent electronically to the list of recipients.

The questionnaire designed for this purpose sought experience and opinion of the participants with regard to the impact of the oil and gas value chain and local content role in aiding job creation and human resources in the Omani economy. Apart from demographical and personal questions the participants were asked about issues such as the importance of the local content in their organization, the areas in which the local suppliers need training and assessment, their expectations regarding the local content requirement in oil and gas projects, barriers related to handling of the local content, existing strategies followed with respect to the local content policy, efficiency and effectiveness of the policy and the implemented strategies (if any), and finally on the role of HRD and the various government initiatives for the promotion of local content in Oman economy. The questionnaire was designed using a Likert scale with five options available, spanning from strongly agree with the statement to strongly disagree.

Interviews

For the second stage and to understand perception with regards to the topics under the study, senior officials from differing segments but related to Oil and Gas industry were targeted. An open ended questionnaire was used for this purpose, for which a non-probability convenience sampling was used to collect the information. Interviews were arranged with thirteen figures engaged in higher echelons of organisations from four segments— the Government, Oil & Gas Operations, Oil & Gas service providers and Academic institutions. Interviews were arranged with the participants following an initial contact. Interviews were recorded (when agreed), and issues related to strategic aspects of the Oil & Gas sector such as demands, supply, manpower, barriers, governmental policies, and so on were discussed.

The interviewees had between 18 to 25 years of total experience in their professional career with no less than 10-15 years with the case organizations. In summary the participants were in groups from state, Oil & Gas service providers and academic institutions.

The questions set for the interviews were sent in advance to the participants, and interviews took place for 1-1.5 hour each. Questions were arranged in two parts. In the first general background information of the participants was captured. In the second section specific information was sought from the interviewees under ten headings including the current demand and supply gaps in the oil and gas sector (so that the current situation in the Oman can be explained), issues of the man power in Oman and what is the expected situation in 2022, burgeoning man power demand in various oil and gas industry in Oman, value chain in oil and gas sector, barriers faced by government and the measures taken by the government to provide training to the local employees. Also questions were asked in regard with the role of the private sector in the oil and gas industry in Oman, their role in various government initiatives, and the role played by In Country Value (ICV) in developing local human resource in oil and gas industry.

Data analysis

Survey data analysis

Responses received from 380 of the randomly selected employees. A descriptive analysis of part of the outcome reflecting on key issues is presented here. The results shed light on the practice and process of Omanization in their respective organizations and the benefits there from

39% of the respondents were Omani nationals and the rest are considered as expatriates. It was found that ICV has recognized the strong potential of women joining workforce in stimulating its own localization policy. In analysing the departments of engagement, it was found that that

majority of the respondents were affiliated largely with the Oil and Gas Ministry and Production sector which were 26% and 28% respectively.

In analysing years of experience, education and current position of the respondents, it was revealed that a significant number of employees possess vocational qualification (19%), while nearly 42% of respondents had post graduate degree. Also close to 78% of them had been working with the organization for between 6-20 years. The results also exhibited that a considerable portion of the respondents was mainly at four positions that are managers, team lead, engineers and supervisors with the percentage of 32%, 18%, 26% and 15% respectively. About 74% of the respondents agreed to the prominence of local content within the functioning of their organizations, both in public and private sectors. It is also found out that that in almost all fields there is still a scope for training of local talents to get them prepared to execute either semi-skilled or skilled functions particularly within the gas and oil sector. About 40% of the respondents pointed that there is need for training of the local workforce, owing to their lack of competency and specific skills required in the concerned sector. Developing local sourcing capabilities within the Omani economy will empower organizations to achieve more suppleness along with a ground-breaking mind-set, to handle globalization challenges.

On cultural aspects of HRM, most of the respondents surveyed agreed that connection and socialisation among people of different background, specifically between the Omanis and the expatriates, is very limited. Only 42% of the total respondents showed to have engaged at personal level with people coming from other nations outside work. In identifying the phases in oil and gas operation which they perceive to be most viable for local content activities, most participants agreed with upstream (53%) over midstream (29%) and downstream (18%). This should suggest the area for the ICV programme to focus on would be upstream in the O&G supply chain, which entails exploration and drilling or generally the discovery of oil. This reflects that despite the large investments in upstream activities, returns are greater in the mid and downstream side. Once discovered, oil resources could generate revenues for years and investment made can be ploughed back to other discoveries and to production and marketing of the product. Thus, the need for local content and potential employment opportunities for Omani nationals are wider in this direction of the value chain. Accordingly the lack of local skills and regulatory mechanisms in offshore upstream activities often is viewed as a limitation towards more profitable operations. Hence, ICV can be a strategic move towards reducing these challenges.

On suggesting the barrier in implementing the same while handling of projects, 29% of all the respondents stated that lack of quality of education and skills among the Omani nationals pose as a significant barrier followed by lack of competent labour (21%). Unrealistic expectations of and from the local content act as barrier which is on equal footing with lack of internal local content strategy within organizations and weak financial basis. Most of the private sector organization lack efficient plans for employing and utilizing the local content and also deny providing facilities approved by the government Al-Shanfari, 2012).

About 69% of the respondents' organisations have been or are presently using a local content strategy to fulfil localization targets and potentials. These strategies were deemed to be important for the affiliated organisations of 55% of the respondents. On the other hand two key factors were identified to justify the implementation of local content strategies, which are providing competitive advantage and reducing costs.

Analysing further, about 61% of the respondents affirmatively stated that the existing local content strategies formulated by the Ministry of Manpower (MOM) and applied in both private and public enterprises are competent enough to draw the preferred results. Finally, the results showed that 36% of the respondents are of the belief that development of local education and training centres for skill development has been a key approach that Oman has exploited to further its local content strategy.

Qualitative Analysis Review

Analysis of the content of the interviews which included a wide range of quotes from the participants are briefly presented here. Majority of the respondents stated that the deficiency of skilled workforce has led to pilfering of expertise by the opponent corporations, and have also lead to mounting pressure on payments and a substantial growth in the costs of acquiring and holding manpower. The increasing demand of manpower is posing challenges for the organizations. This problem can be met through the operational training programs introduced by the government and monitored by the corresponding businesses. The gap in the skills is identified by most interviewees which shall be compensated through adequate training. Efforts have been made to provide special skills to the employees through talent management and training. Expansion of technological improvements has also been originated by various private establishments to entice Omanis to join the private sector over public along with imparting training.

The linkage between governmental policies and O&G companies was viewed as critical due to larger dependence of the economy on hydrocarbons. The initiatives taken in this regard were developing of a common program by converging oil and gas industry, synchronization of efforts and initiatives taking full advantage of the return on value creation, and constructing of efforts towards well-organized ICV development through leveraging of capability and proficiency of ICV board.

The respondents' reflection on the barriers in implementing ICV associated policies, showed that minimum wage policy along with the establishment of monthly unemployment benefit of OMR 150 (\$390) has backed up as barriers faced by the government in executing full-fledged Omanization plan. The combination of strategies can prove to be beneficial in transformation of the local content into highly skilled professionals as stated by the respondents. Moreover, International Labour Organization policies and procedure must be followed which would result in skilled labour force.

Regarding Private sector's role in transforming the workers into highly-skilled professionals, it was elucidated by the respondents that private sector is laying emphasis on talent management and development and is keen in developing competitive work force. The ICV efforts of the government are aided by the private sector through working together with the administrative agencies to make ICV expansion a success within the specified time period.

A considerable outcome has been observed of the ICV policy undertaken by the government and the exertion carried out by both the private as well as public enterprises in attaining Omanization strategies within their structural operation. Finally on possible areas to be developed in the process of localization and implementation of the ICV policy, the interviewees emphasised again on domestic manpower as the key target to be developed, which is already an integral part of ICV policy.

Discussion and Conclusions

The study aimed to undertake an exploratory examination of the scenarios which have been functioning in context of the ICV (Omanization) policy in both public and private organization of the O&G industry.

The results show that ICV has led to some extensive job opportunities for Omani nationals. Such process of job creation evidently needs human resource development of the nationals, where there is still a lack of required professional skills, which reflects proposition made by Lahiri & Ono (2003). This, as supported by the data, requires enhanced training programs through human resource development (HRD) initiatives among organizations supported by the Government. HRD is shown to plays a significant role in not only transforming the local content into effective manpower resource but also in motivating them to develop and retain

their organizational commitment and productivity. The results support suggestion by Papyrakis & Gerlagh (2004) that HRD adds value to Oman's economy, which are shown here to take effect through creation of positive attitude among employees, increasing of individual output, ensuring greater flexibility and workflow, enhancing workforces' performance through on-job training and sponsoring formal education outside workplace to employees thereby guaranteeing their organizational commitment.

The data also show existence of gaps in the demand and supply of manpower within Oil and Gas Industry. This mostly can be observed in the private sector than the public ones. Until very recently private sector firms were reluctant in investing time and resources over training and development of their workforce, and instead preferred to recruit expats who would be be properly educated and trained over nationals. Clashes of interest have been experienced between the drive from the government for hiring national (e.g. in accountancy positions) and the needs of the private employers. Private sector organisations have been apprehensive of implementing human resource development owing to reasons such as the risk of losing expertise to their competitors thereby incurring huge loss to the organization (Ennis & Al-Jamali 2014). Besides issues related to salaries, benefits and job security as devised by the government for national, which is not the case with expatriates, would further effect the willingness of private sector to engage in the program (Ennis & Al-Jamali 2014). While some steps have been taken by the government to present incentives for the private sector (Szajnowska-Wysocka, 2009), there is still space to improve in this area.

While there are signs of success in introducing the policies for encouraging Oman nationals to take up job in the concerned sector in both private and public enterprises, there are still concerns over reaching the desired goals. Such limited achievements have been reflected in reports as well (see Oman Observer, 2013). This study however find a growing optimism and positive experience in engagement private sector in raising the Omanis' employment level.

The study identified certain weak spots in the ICV policy which needs improvement. There is a need for devising HRD programs that induce knowledge and capabilities for implementing strategies through innovation and creativity. It has become imperative for organisations to include cost-effective methods in their approach to production, which could be supported by hiring talented and skilled individuals, who should also be trained accordingly.

Another major loophole present in the working sector of the country is lack of workforce diversity. There exists gender disparity and negligible presence of people with disabilities. It is important for the government to revisit and enhance the policies for diversification of workforces providing women and people with disabilities equal opportunities.

This study shows that there are many possible avenues of transformation that are open to the government at the present time via the ICV programs it has devised. Such policies should improve the human rights standing for the Omani government vis-à-vis the international community because it shows a commitment to the liberalization of trade policies and the adoption of reforms that promote a free-market economy.

Also talent management remains a crucial area which needs development from the side of the government and the organisation, if the full effects of Omanisation are to be realised. Some of the tools that can be adopted for measuring quantified success of ICV policies are evaluation of human resources on a regular basis in both private and public sectors organizations. This approach will also support in determining the success ratio achieved by ICV policy and thus assist in determining the course of action to be pursued for supporting Oman's economic development and sustainability approach.

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