

AN ANALYSIS OF EMPLOYEE WELFARE PRACTICES IN OIL AND GAS CONSTRUCTION PROJECTS AT QATAR

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Abstract

Oil and Gas construction industry has been identified as a very dangerous and risky construction industry sub-sector in the world compared to building and other infrastructure sectors. This field requires highly experienced employees. Those employees are fully open to dangerous situations and risky environment and it may course to lose their life/body parts, permanent disabilities or mental issues. Nowadays, many of Oil & Gas construction companies are using advanced technology to accelerate the works and protect their employee's from risk. But still, there is risk and incidents are reported all over the world. In this research paper, welfare facilities in Oil & Gas construction industry in Qatar are considered and is aimed to find out awareness of the welfare facilities within that field. First of all, the researcher carried out a thorough literature review using past published books, magazines, journals and the internet. Then the online survey was designed using 30 numbers of questions to collect the required data. Around, 50 numbers of responders are responded to the questionnaire and most of them are supervisory level. 59% are fully aware about facilities and other 41% are partially awareness about the welfare facilities. According to this study, some of the welfare facilities have to be improved and developed around some key areas, like orientation programs, well experience staff for safety department and health and insurance benefits.

Key words: Construction risk management, Oil and Gas Industry, Employee welfare

Introduction

After the exploration of Oil and Gas in Qatar, many developments have taken place oil wells, gas refinery, storage tanks, distribution pipe network, harbours and road network with other infrastructure. During development of the process there were many life losses, personal injuries, material loss, financial loss or time loss which should be controlled and minimized. This is the purpose for that they implemented health and safety system including welfare for project sites and workers (Geoexpro, 2016).

This research is based on welfare facilities provided by the Qatar Petroleum (QP), Qatar Gas (QG) and other qualified contractors during construction process. When considering about Oil and Gas Construction, there are many kinds of factors effecting for welfare facilities. This study will give some idea about welfare facilities and its issues within the Oil and Gas Construction industry in Qatar.

Research Problem

Oil and Gas Construction is a profitable construction field anywhere in the world. Also, compared to another type of construction, Oil and Gas Construction field is more difficult and critical. They use more advanced and high-quality construction methods. Then also many losses have happened frequently. Based on those issues automatically they had to use best safety procedures during construction and nowadays it's mandatory.

The researcher has been personally involved in Oil and Gas Construction field in the Qatar and saw the qualities, standard of safety and its weakness areas. This study will be discussing those issues.

The Oil and Gas construction field has been identified as one of mainly importance industries to develop the country including communities. Also this field is the most dangerous filed with compare to another type of construction fields. Mainly any of countries' economy depends on developed and being developing activities and progress of infrastructure development. Later on,detailed planning requirements arise in construction industry due to major developments in the construction industry after the industrial revolution and due to such a development there are many of job categories created, like Engineers, Architects, Designers etc.

According to the above explanation, the construction field is growing in every part of the earth and also became part of human's lifestyle. As per this development, so many projects are on-going in identified locations including developing of infrastructures facility. During the development of Oil and gas Construction industry many issues came to the front, especially health and safety and welfare issues.

Some of the unique issues can be identified as below,

- Workers face high temperature compared to other areas due to emanating gas
- Sometimes the contractor's face non availability of experience workforce.
- The employer and the contractor have to spend more cost for Health and Safety including welfare facilities compared to another type of construction projects.
- No one can work continuously in Oil & Gas field. If anyone works more than 7 years in the same field he will not able to become a parent due to poisoned gases/ high temperature and radiation. (Unpublished information)

Objectives

This research has the following research objectives.

1. Investigate required welfare facilities for the oil and gas construction projects.
2. Examine the employer's and contractor's responsibilities for welfare facilities.
3. Critically examine barriers to develop the welfare facilities.
4. Analyze the negative and positive impacts of given welfare facilities.
5. Identify the level of development to be done for welfare facilities in the Oil and Gas projects.

Scope of the Study

As per scope of this study, the research aims to communicate to the academic world about quality and standard of welfare facilities within Oil and Gas construction industry in Qatar and identify the current problems within the industry and recommend the solutions for future purpose.

Mainly, during literature review researcher identified that no any past research studies for the selected topic in Qatar context. Therefore, the researcher decided to go his own way based on research done in different context.

This research will be carried out on some of the completed and on-going projects related to Oil & Gas filed in industrial areas of Qatar.

Literature Review

The construction field is one kind of process which is developed from the past to future day by day with new technologies and methods. Therefore, firstly need to identify past finding details and shall study to get a full idea about the present situation of the selected topic. Oil and Gas construction field has been highly rooted as a big tree around the world.

Goyal (1995) studied labour welfare and job satisfaction in Cotton Textile Industry in Punjab. The objectives of this research were to find out the connection between labour welfare measures and job satisfaction. It has been concluded in the study that there exists the positive correlation between job satisfaction and labour welfare measures.

Shrivastava (2004) has studied about “Impacts of labour welfare on employee attitude and job satisfaction”. His main target was to find out how welfare can effect to be satisfying their jobs in private and government sectors. 200 samples were selected for the study by incidental sample method. He concluded both sector workers distinguishable about welfare facilities. He found government sector facility is better than the private sector and the government sector works more satisfying about their job than the private sector. Also, private sector workers are more favourable to their employers than the government sector.

Michel (2005) has used British National Sample Survey Data to analyse the cooperative unionism and employees’ welfare. The author has observed that union workplaces are found to have more employees’ welfare provisions than the non-union workplace.

The above-mentioned researchers have touched different areas relating to labour welfare but none of them studies seems to have touched the area like perceptions of workers towards labour welfare facilities in the oil and gas industrial sector. The present study proposes to fill the gap in the existing literature. Thus in this paper, an attempt has been made to analyze perceptions of workers towards labour welfare facilities.

Research Methodology

The research was carried out as per research arm and objectives to discover about the theories, factors and ideas related to the welfare facilities in the Oil and Gas construction in Qatar. As per literature review, main concern of this research is on the importance of welfare facilities for Oil and Gas Construction projects.

This research was carried out according to the quantitative and qualitative methods including the set of questionnaires, Project correspondences (e.g. daily reports, log notes, minutes of meetings, contractual letters, posters, notice boards, submittals, approvals etc.), government publications, past theses and internet sources. Both of methods will be used to identify and discuss the real situation of related to welfare facilities in the Oil and Gas construction in Qatar including suggesting the appropriate solution for the issues.

Population

Mainly, in Qatar Oil and Gas sector running under Qatar Petroleum by many of Government Companies and departments. Namely, Qatar Gas, Ras Gas, Petrochemical and Fertilizer Companies, LNG Terminals, Metal and Plastic Companies and other local and international investments. The research has selected Qatar Gas as main population to select the samples and by the time of research 159 projects on going under them. (Qatargas.com, 2016)

Sample

After reviewing the details from the Qatar Gas, the researcher selected total of 10 projects (as 09 numbers ongoing and 01 number completed project) for the sample. Simple random sampling method was used to represent the total population. While implementing this method, the persons those who are connected to this study will be subjected to face to the set of questionnaires or any other identically way.

Sample Composition

Project managers, project and site engineers, QC engineers, Quantity Surveyors, Planning engineers, document controllers, clerks, supervisors and educated people relevant to this subject etc., all questionnaires and discussions was between these teams. According to availability, a total number of samples were 42 numbers from 10 projects.

Data Collection Procedure

In this research, the researcher has planned to collect data by primary and secondary data collection methods. Primary data was collected by questionnaires, observations, formal or informal interviews and discussions. Also, secondary data collection was by subject related journals, articles, books, newspapers, log notes, submittals and internet sources or any other reliable sources.

Findings

Data analysis is the processing method of systematically applying statistical and/or logical techniques to describe and illustrate, condense and recap, and evaluate data. According to Shamoo and Resnik (2003) various analytic procedures “provide a way of drawing inductive inferences from data and distinguishing the signal (the phenomenon of interest) from the noise (statistical fluctuations) present in the data”.

There are 30 numbers of questions in the questionnaire send to responders and among of them 42 numbers of responders responded to the all questions. The data was collected using online questionnaire using survey monkey survey system.

Discussion of Responder’s General Information

According to provided analysed data, overall all responders are within age limit from 18 to 45 years and highly educated from minimum HND to MSc levels. It can be concluded as higher education level required joining in Oil and Gas field.

According to analysed data, all responders have overall construction industries experience in satisfying level (minimum of 3 years) and 07 numbers of responders have more than 15 years overall experience in the construction industries.

According to analysed data, more than 85% responders had married and 70% of them have children. It’s a good sign for their life and against the popular belief. As discussed earlier, if anyone is working in Oil and Gas the perception was that is not good for life and especially to the fertility. They have to face many of health issues when they’re working a long time in this field.

Discussion of Required Welfare Facilities to the Oil and Gas Construction Field

The researcher analysed some of the safety orientation programmes to get an idea from responders. Those orientation programmes have to be completed before starting the work first day at the site.

According to the collected and analysed data, these orientation programmes are most important to Oil and Gas construction field and it’s affecting the production and minimise the incident & injuries at working place. Everybody’s main target is to earn money and go home safely without any disabilities. To reach that target, this orientation programmes are very helpful. 90% responders are thinking those programmes are required to Oil & Gas field.

If contractors want to receive the best product from their workforce, they have to provide those facilities without any objection. If we talk about some facilities according to collected data with including researcher’s personal experience, especially in summer time contractor has to provide resting shelter with AC or electrical fans. In summer time Qatar temperature goes too high and

reaches more than 54°C. It's very high temperature compared to non-Oil & Gas construction areas. As per QG and QP regulation workers has to take rest in some intervals while working summer season. Also, in transport vehicles should have AC and all passengers have to wear the seat belts and if anyone fails to that, they will be removed from out of project and company.

Some of Oil & Gas projects are located in very dangerous areas and these areas are not suitable for life. Also, who are working on those projects and they are directly exposed to the gas or oil environment. Therefore, companies provide to them every 2, 3 or 6 months interval vacations to become refreshing including salaries for holidays. Some of the projects are located in non-danger places, that companies provide vacation between every 1 or 2 years. Some of companies are forced to their workers to go for vacation, because of they want to keep them motivated and healthy.

Emergency procedure is required to any kind of construction projects. In working place should clearly mention about assembly point and fire escape directions. Also, all workers should have the training to react without any panic to emergency situations.

Some of the above mentioned, facilities may not be welfare facilities but those are directly involved to welfare facilities. Therefore, the researcher included those to questionnaires to collect the data.

According to the analysed data can conclude more than 90% responders had suggested those facilities are required to Oil and Gas construction projects and it will be very helpful to become a success in this field and prevent the incidents and accidents. Those facilities will be modified or changed according to the type of project or situation.

Discuss Employer's and Contractor's Responsibilities for Welfare Facilities

This section main target is to identify the responsibilities and satisfaction levels about welfare facilities.

According to the collected and analysed data, all responders have an idea about welfare facilities and how much it's important to them. It's a good improvement in the construction field and it has to be maintained without any drop down. Around 80% responders have realized that welfare facilities are required to their working places. Responder's companies have an idea about their worker's welfare facilities and it will help to maintain the standard of welfare facilities.

According to collected and analysed data, we can conclude many of companies have an idea and follow-up about workers welfare facilities and they provide the professional team to maintain those requirements.

Discuss Barriers to Develop the Welfare Facilities

The contractor has to allocate the budget and sometimes the additional cost for welfare facilities without any direct benefits. Therefore, many of contractors are trying to avoid provide those facilities. There are many reasons to avoid those facilities, likewise, the cost is high, lack of knowledge of employer or contractor required the professional team to follow-up and maintain, work progress becomes slow due to these requirements, workers don't like or all of these reasons. Based on analysed data, most of the responders are thinking due to high-cost they avoid those facilities and some other responders are thinking due to all above mention reasons, the contractors avoid welfare facilities. This issue will be effective to the project progress and productivity directly; therefore the contractors and employers have to fully concentrate on this matter.

According to analysed data, most of the responders are happy with their salaries. Overall wise Oil and Gas field salary scale is better to level compared to other areas. Only a 10% of responders are unsatisfied with their salaries. Those companies have to restructure about their salaries.

Most of the responders are thinking welfare facilities required their company as per analysed data and also their thinking those welfare issues will be effective to project progress/productivity. If the

contractor wants to complete the project on time without any issues, they have to make employees happy, and then the only production may run smoothly.

Due to many of reasons, safety issues will happen in the construction sites but according to responder's experience on who involved construction projects, they all are responsible for the lack of safety issues.

As discussed before, orientation and practical programmes and workshop activities are very helpful to bring safety and welfare news among employees. According to responders respond, their companies have to hold workshop programmes to show the importance of safety and welfare facilities for their life.

Discussion & Conclusion

The Oil and Gas construction industry is acting the major part in the world. Therefore, present days Oil and Gas field become the part of human life and consumers starting from the kitchen. Also, the countries who possess Oil and Gas became rich countries. Some of the countries began the civil wars because of availability of Oil and Gas. Especially the Middle East are becoming rich countries due to natural resources and ruling by rich families. They started fast growing construction process and system. Therefore, they hired skilled and unskilled workforce from outside to fulfil the requirements. At the beginning, there were many accidents, incidents, life losses, recovered or un-recover disables/injuries happened every day. Then, government and construction companies implemented gradually the safety system and procedures including proper welfare system to protect their workforce. Presentday, it has come up to high-quality standard and come to a state that if no safety no work. In this study, the researcher has been discussed the current situation, problem as per proper analysis and as well as give some of the solutions to maintain and develop proper welfare facilities.

In construction, today's technology will be out of the system by tomorrow. Especially, it's applied in the Oil and Gas field. Therefore, all departments have to develop along with construction. Safety department has to find out new methods and system to minimise the incidents and accidents. Most of the welfare facilities are attached with HSE. Therefore, development of HSE will help to provide proper welfare facilities to workers.

The objectives of this study were to identify the current welfare facilities in Oil & Gas field and recommend how to maintain and develop along with construction development. The researcher had included some of the safety requirement to study along with welfare facilities to identify the impacts. According to the analysed data, all responders are higher educated and not required to develop but need to maintain the same level without any dropping.

Companies have to do medical check-up regularly basis to keep their workers in healthy. If anyone fails to fulfil that requirement, the contractor has to keep them away from danger zone.

Companies have to develop the safety training including the method of present the orientation programmes with new technologies.

Companies have to provide educated and experienced staff to monitor and maintain the safety and welfare facilities at the site. Always workers are lazy to follow-up the safety if no one behind them and needs to implement the fine system if anyone breaks the rules.

Health and insurance benefits should maintain the same level including some of the development as per project requirement. Health insurance is most important while someone gets in sick. Overall medical expenses are high in the Middle East compare to Asian countries; therefore need help from third parties. Then, insurance companies came with a solution for those issues after long-time. Therefore, nowadays every company has to provide valid insurance cards to their workers as per Qatar labour law by free of charge and its help to workers protect their health.

Availability of doctor at the site is not satisfaction level. Companies have to treat this matter as very serious matter. At least, they have to provide qualified male nurse if they can't provide a doctor.

Companies cannot avoid providing welfare facilities due high-cost and no any direct benefits. But any incident or accident happened due to lack of safety issues, it will be a black mark to the contractor within the industry and he may able to get new works.

Companies have to reconsider about their worker's salaries and need to restructure it. On par with riskiness actually, Oil and Gas filed salaries should be better than those other sectors due to risk compared to other fields.

Companies have to stop circulating of rumours about welfare facilities and for that; they have to establish proper system to circulate correct news.

Especially keep offices and washrooms in clean, provide pure drinking water, provide better medical facilities, canteen or grocery facilities, laundry and proper housekeeping and waste management facilities has to provide and maintain continually on a daily basis. The employer and the contractor have to follow-up and support to safety teams by providing enough budget and proper instructions. However, these basic requirements are often neglected. A cold water tap and chemical toilet on their own are not adequate facilities. Good facilities can positively benefit health and well-being and can help to prevent dermatitis.

Whatever the contractor or employer cannot escape from without providing welfare facilities. It may be cost high or any other reasons, but he has to provide proper welfare system.

The researcher recommends that all suggestion and solutions mention in conclusion and in this session must be implemented to develop the standard the welfare facilities in the Oil and Gas construction field in Qatar.

For the future researchers, it will be better to consider all types of construction such as building, road and bridge constructions etc., to increase the scope of the research. Also to increase the precision of the research, the sample must be increased to gather more data.

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