

**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 danger construction process in the world compared to building and other infrastructure sectors. This field required highly experience employees. Those employees are fully open to dangerous situations and 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 reporting all over the world daily.

In this research paper considered about welfare facilities in Oil & Gas construction industry in the Qatar and has been aimed to find out awareness of the welfare facilities within that field. First of all, the researcher studied about literature review had been carrying out using past published books, magazines, journals and the internet. Secondly, sketch out all requirements for the study. Then, the online survey has been done by questioning 30 numbers of questions in online to collect the required data. Around, 50 numbers of responders are responded to the questionnaire and most of them are supervisory level and 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 improve and develop around some areas. Likewise, orientation programs, well experience staff for safety department, properly maintain of health and insurance benefits.

1.1 BACKGROUND OF STUDY

After exploration of Oil and Gas in Qatar, there was development happened day to day including Oil wells, Gas refinery, storage tanks, distribution pipe network, harbours and road network with other infrastructure. While development of the process there were many life loss, personal injuries, material loss, financial or time at large situation are happened and should be controlled and to be minimized. The purpose for that they implemented health and safety system including welfare for project sites and workers. (Geoexpro, 2016)

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

1.2 REASONS TO SELECT THIS TOPIC AS RESEARCH

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

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

1.3 ISSUES IN THIS TOPIC

The Oil and Gas construction field have been identifying as one of mainly importance industries to develop the country including communities, also this field is the most danger 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, details plan requirement came to construction industry due to major developments in the

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construction industry after the industrial revolution and due to such a development there are many of job categories newly 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 ongoing in identified locations including developing of infrastructures facility. While development on process so many issues came to the front, especially health and safety & welfare issues.

Some of the issues can identify as below,

- Workers face high temperature compare to other areas due to existing Gas plants
- Sometimes the contractor's face insufficient experience workforce.
- The Employer and the Contractor have to spend more cost for Health and Safety including welfare facilities compare 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 the parent. (Unpublished information)

1.4 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. Analysis the negative and positive impacts of given welfare facilities.
5. Identify the level of development to be done for welfare facilities in the Oil & Gas projects.

1.5 SCOPE OF THE STUDY (LIMITATIONS AND BARRIERS)

As per scope of this study, the researcher wants to tell the world about quality and standard of welfare facilities within Oil and Gas construction industry and identify the current problems within the industry and find out the solutions for future purpose.

Mainly, while study literature review researcher has been identifying there no any past research study or books for the selected topic in public. Therefore, the researcher has decided to go own way based on another thesis.

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

2.0 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, before starting this research, firstly need to identify past finding details and shall study to get a full idea about the present situation of the selected topic. The reason is 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 & 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 been studying 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 from Kanpur for the study by incidental sample method from both sectors. He concluded both sectors 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 employees 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 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.

3.1 Theoretical Framework

The research will be carried out as per research aim 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 reviews, will be concern about how the importance of welfare facilities any kind of construction project.

This research will be 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.

3.2 Population

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

3.3 Sample

After reviewing the details from the Qatar Gas, the researcher selected total 10 projects (as 09 numbers ongoing and 01 number completed project) selected for the sample. Simple random sampling method selects and will be 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.

3.4 Sample Composition

Project managers, project & site engineers, QC engineers, Quantity Surveyors, Planning engineers, document controllers, clerks, supervisors and educated people relevant to this subject etc., all questionnaires and discussions will be done between these teams. According to availability, a total number of samples will be 30 numbers from 10 projects. The researcher will be contacting all of these samples as explained in methodology.

3.5 Data Collection Procedure

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

4.0 DATA ANALYSE AND PRESENTATION

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”.

Researcher this imported data was collected from using well prepared and well-organised set of online questionnaires using the survey monkey online system. There are 30 numbers of question sent to responders and among of them 42 numbers of responders responded to the all questions.

4.1 Discussion of about responder’s general information

According to provided analysed data, overall wise all responders are age limit from 18 to 45 years and highly educated from HND to MSc levels. Then, we can conclude as higher education level required joining in Oil and Gas field.

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According to analysed data, all responder's have overall construction industries experience in satisfying level 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. It's a good sign for their life. As discussed earlier, if anyone is working in Oil and Gas field not good for life and especially unmarried people. There have to face many of health issue when they're working a long time this field.

From this session, we can conclude Oil and Gas field need higher educated young and married people to continue the operation.

4.2 Discussion of required welfare facilities to the Oil and Gas construction field

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

According to the collected and analysed data, these orientation programmes are most imported to Oil and Gas construction field and it's affected the production and minimise the incident & injuries at working place. Everybody's main target is earning money and goes home safely without any disabilities. To reach that target, this orientation programmes are very helpful. Most of the responders are thinking those programmes required to Oil & Gas field.

If contractors are wanted 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 to more than 54°C. It's very high temperature compare 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 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

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become refreshing including salaries for holidays. Some of the projects are located 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 alive and healthy.

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

Above mention, some of the 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 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 change according to the type of project or situation.

4.3 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 been thinking welfare facilities 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.

4.4 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

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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 this 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 are avoided 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. Some other 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 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 & 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.

5.0 CONCLUSION AND RECOMMENDATION

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. Day by day they identify the sources and started the developments. Also, who has Oil and Gas they became a reach people and countries. But some of the countries began the civil wars because of availability of Oil and Gas. Especially the Middle East are becoming reach countries due to natural resources and ruling by reach 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

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implement slowly by slowly the safety system and procedures including proper welfare system to protect their workforce. Present day, it has come up to high-quality standard and became if no safety no works. In this study, the researcher has been discussing the current situation, problem as per proper analysis and as well as give some of the solutions to maintain and develop proper welfare facilities.

Construction is one of the major processes with developing day by day. Maybe today technology will be out of the system for 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 were of this study 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.

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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 can't 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.

Satisfaction level of salaries is not in a good place. Companies have to reconsider about their worker's salaries and need to restructure it. 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 & washrooms in clean, provide pure drinking water, provide better medical facilities, canteen or grocery facilities, laundry and proper housekeeping & 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.

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 precision of the research. And also to increase the precision of the research, the sample must be increased to gather more data.

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