

The importance of human resource training strategy in the petroleum company - Case Study Company Sonatrach (2006-2015) -

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Abstract: This study aims to find out the reality of human resource training in petroleum companies, a case study of the National Company for transportation and marketing of hydrocarbons (Sonatrach) during the period from 2006 to 2015. We adopted in this study, the descriptive method in order to provide a description of the variable study (training), and the analytical method in the practical side through curves analysis.

The study concluded that human resource training process is very expensive especially the external training and training is mostly devoted to the managers and specialists. The effectiveness of training programs that contribute to reducing the costs resulting from forgone days and work accidents.

Keywords: Human Resource, Training, Internal Training, External Training, Sonatrach.

Jel Classification Codes : M12, M53, Q15.

I- Introduction:

Training is one of the basic elements of management science, because it has a direct correlation between sufficient productivity and human resources development. It is also essential in the development of the skills of workers and employees in different areas and in all institutions of different types, (industrial, commercial, services ... etc).

The petroleum enterprises are among the most important organizations, which cannot avoid human resources training and must put the training process into their long-term strategy, in order to also avoid, a deficit or a lack of knowledge and skills of their employees.

We used in this study many previous studies in the theoretical and statistical side:

- Saleh Essam Kauttuah - Workforce training for increased productivity in Saudi Arabia-thesis to requirement of doctor of business administration, faculty of business and law, Victoria university ,Melbourne Australia, 2013.¹

- Aidah Nassazi - effects of training on employee performance - Thesis, faculty business Economics and tourism, university of applied science, Uganda, 2013.²

- Abdul Hakim Dardar ,Ahmed jusoh and Amran Rasli - The impact of job training ,job satisfaction and alternative job opportunities on job turnover in Libyan oil companies- paper ,the international conference on Asia pacific business Innovation &Technology management ,ELSEVIER , Malaysia ,2012.³

- Zieneb Ben Ammar Mamlouk et Nacef Dhaouadi - Formation et développement des compétences, article, la revue des sciences de gestion, cairn ,2007⁴

To achieve the objective of this study we try to answer the following question:

What is the reality of human resource training in the oil companies? With the case study of the National Company for transportation and marketing of hydrocarbons (Sonatrach).

Training constitutes a basic concept in human resource development. It is concerned with developing a particular skill to a desired standard by instruction and practice. Training is a highly useful tool that can bring an employee into a position where they can do their job correctly, effectively, and conscientiously. Training is the act of increasing the knowledge and skill of an employee for doing a particular job.

I.1. Definition of Training:

a- Training and development practices constitute one of the most important ways to assist personnel in gaining new knowledge and skills required to adhere to competitive standards studies have suggested that human resource practices such as extensive training would create a sense of organizational support. Providing career development opportunities via training and development of employees is increasingly recognized as an important aspect of best human resource management practices.⁵

b- Training is the only factor motivating employees, it is an opportunity to continue to grow and develop and the goal of training is to know these skills carried by the employee and exploitation of Service Corporation.⁶

c- The training concept is particularly tailored to the needs of entrepreneurs, start-up companies or small to medium-sized companies looking for information and strategies to build up or develop a life science business around their intellectual assets.⁷

I.2. Type of training :

a. On-The-Job Training: On-the-job training is planned, structured, and mostly carried out at the trainee's workplace. It is sometimes carried out in a special on-site training area. In on-the-job training, managers, supervisors, trainers and colleagues spend a large amount of time with trainees to teach previously determined skill sets. It can also involve training that has no significant impact on productivity .In on-the-job training (OJT), the work itself becomes an integral part of the training provided 70% of Chinese managers receive on-the-job training as compared with under 55% in North America, 45% in Great Britain and 21% in France.⁸

b. Off-The-Job Training: Off-the-job training can involve group discussions, one-to-one tutorials, lectures, reading, training courses and workshops.

This type of training enables trainees to learn and apply new skills and knowledge in a safe working context. Not all performance problems can be solved by training that should not be a substitute for motivation, the right tools or equipment, and the right supervision. Training needs to be provided when employees lack of skills or information to work productively when the right resources exist to draw up, impart, and follow up the training and when training resolves performance problems. It is worthwhile providing off-the-job training when a large number of staff have a similar training requirement and when there are adequate skills and resources for the design and provision of training. Planned OJT is appropriate when the criteria above are complied with and when it is possible to minimize work distractions, when training at work will not represent a threat to health, safety, or productivity and when there are benefits to be obtained from training in real time.⁹

I.3. Training delivery methods:

a. Team Training: Through team training, people are trained to problem-solve more effectively in groups, where observation and feedback are required during the training

process. Team training is often used in the industrial sector, government, and the army. Specific team training strategies have been developed such as cross-training, coordination training, leadership training, self-correction and distributed team training.

Evidence shows that team training functions well when it is theoretically driven. It concentrates on the necessary skills, and gives trainees realistic opportunities for feedback¹⁰.

b. Mentoring: Training can also be delivered through mentoring. Mentors possess specific knowledge, skills and abilities (KSAs) in problem solving, conflict resolution, communication, defining objectives and planning.¹¹

c. Simulation: This is a popular way of delivering training and is commonly used by businesses, educational establishments, and military.

Many simulators and virtual environments are able to mimic terrain, equipment breakdowns, and movement, as well as vibratory and visual cues.

d. Seminars: These bring trainees together in small groups for regular meetings, which focus on a specific topic, with trainees being expected to get actively involved. Seminars help staff to become more familiar with their job functions and more actively involved in them. They also enable them to handle problems that arise on a regular basis.¹²

e. Field Trips and Tours: These give staff the opportunity to experience situations away from the workplace and to obtain practical information about their job functions.

Few organizations use field trips as a component of training due to logistical limitations, shortage of appropriate training materials, and unfamiliarity with the outdoors as a suitable training environment.

However, they can be useful for increasing motivation, performance and skills. They can help employees to get a more obvious understanding of job requirements.¹³

f. E-Learning: This refers to the use of information technology to enhance and support education and learning processes and provides a variety of learning strategies and applications to exchange information and acquire skills.

Practical e-learning enables people to access to computer and internet to access e-learning programs, course material, academic and nonacademic staff and to obtain high quality information and qualifications at an appropriate time and place.

The appearance of e-learning at the beginning of the 21st century has encouraged HR departments to provide very specific learning that effectively and directly benefits learners. Through access to training from their computers, trainees can also adapt training to their daily lives.

E-learning is normally less expensive than other kinds of training. It is self-paced, the content is consistent, it can be used anywhere in any time, it is easy to update, manage and control for large numbers of people, and can assist organizations in enhancing performance.¹⁴

1.4. Importance of Training: Training of employees and managers are essential in this changing environment. It is an important activity of HRD, which helps in improving the competency of employees. Training gives a lot of benefits to the employees such as

improvement in efficiency and effectiveness, development of self confidence and assists everyone in self-management.¹⁵

II. Methods:

In terms of the study tool, we have adopted a set of tools in order to collect data that will help to understand of the subject of training, and extracting results that help in finding answers to the problem of the study, to achieve this aim we relied on the following tools:

II.1. The interview: In order to know the reality of training in the company, we conducted many interviews with the managers of departments and divisions.

II.2. Statistical reports:

- Most of the data relied upon in this type of study lies in its annual statistical reports of the company. To study all aspects of the subject and answer the question we relied on:
- Descriptive method in order to provide a description of the study variable (training);
- The analytical method in order to analyze and interpret various data presented in this study.

III. Results and Discussion :

III.1. Training institutions in Sonatrach:

Sonatrach company give a very great importance to the process of training of its human resources, in order to improve the level of their skills and improve their performance, that lead to raise the level of productivity, and thus do their job without mistakes or accidents which caused losses to the company, either material or human losses.

In this regard, the company operates internal training process (different of company's centers) and external training process (In partnership with institutes and international companies specialized in the training process):

III.1.1. Enterprise Development Center: Enterprise Development Center established in 1987 in order to improve the performance of competencies in the fields of management. It has many functions:

- Prepare and edit guide;
- special formation;
- to assist in the formation of Engineering;
- Regulation and supervision of seminars and study days and workshops.
- Development Center intervenes in the following areas: technology and modern information systems, management techniques, business management, languages, documentation, legal and fiscal affairs, economy and finance, security, health and the environment.

III.1.2. Algerian Petroleum Institute: The main objective of the Institute:

- Providing the needs of the oil sector in the following areas: Proficiency, refinement and applied research, with a focus on the central character of the institution Sonatrach. The Institute represented by a set of tasks:
 - Training and proficiency, performance and refinement in different areas of activity of the energy sector, particularly hydrocarbons;
 - Applied research directed as a priority to meet the needs of the hydrocarbon sector;
 - Develop the performance of qualified workers and technicians in the hydrocarbon sector;

- Algerian Petroleum Institute situated in three places:
 - Boumerdes(to train professional engineers);
 - Skikda and Oran (train of technical specialists).¹⁶

III. 2. Types of training in Sonatrach:

Training is divided into two types in Sonatrach:

III.2.1. Training by location: it mean the place specified for training, and it is divided into:

- **Internal training:** this training is done by Sonatrach alone Or in partnership with different Foreign institutes, Like French Institute of Petroleum (FIP);
- **External training:** training that take place outside the company and are often at the Higher Institute of Petroleum (Boumerdes),higher Institute of Petroleum (Skikda), higher Institute of Petroleum (Arzew) and Enterprise Development Center (Arzew).

III.2.2. Training by Persons: It means training for workers, and divides them into three sections:

- **Competency training:** That means training workers in administration, and it is characterized by high costs;
- **qualified workers training(technicians and engineers):** Means training of engineers and technicians working in the company, the aim of this training is the lifting of the abilities to exploit the production equipment.
- **Unqualified workers training:** It means training workers who are not eligible. The aim of the training is to exploit their abilities to achieve the goals of the company.¹⁷

III. 3. Data of Training in Sonatrach:

III. 3.1. Train workers in Sonatrach: Figure (1)

- Train the company's competencies in increased since the year 2006 until the year 2015, from 195 to 284 workers, an increase estimated at 20%, and this is due to the company's efforts to raise the level of this group strategy, in order to become a have the ability to make decisions that be in favor of the company, and in particular at the moment.
- As for qualified workers (engineers and technicians) witnessed as well as high and most of their training was the latest technology used in the oil industry, with the aim of increasing the ability of the company's production and improve the extraction of hydrocarbons rate from the earth and that up to 29%, which is a weak rate compared with the extraction of hydrocarbons rate in the Gulf region, which amounts to about 70% of the well.
- In addition it saw the workers category of non-qualified high of 676 workers to 738 workers an increase estimated at 10%, then the training process saw a decline from the year 2011 to the year 2013 was estimated at 2%.
- As for the years 2014 and 2015 witnessed a slight growth from 775 to 798 workers, an increase of 30%.
- This category is the category remains the weakest and most of their training was dedicated to the first aid...

III. 3.2. Training costs for workers in sonatrach: Figure (2)

The cost of training competencies elevated from the rest of the workers, whether they are qualified or not qualified. For example, in 2014, 262 workers have been trained at a cost of 7008 thousand dinars and 415 engineers were trained at a cost of 2214 thousand dinars.

The cost of competencies (staff) is higher than the cost of engineers, as mentioned above, although the number of engineers more than the number of employees, so that the latter always need training in various disciplines used in the administration, while engineers often have their training is limited to one technology used in the extraction of hydrocarbons.

III. 3.3. The contribution of training in reducing work-related accidents. Figure (3)

The company's activity in 2011 stopped for a period of 120 days, because of four incidents only, while in 2015 the company's activity stopped for a period of 68 days because of the eight accidents, observed from this disparity that contributes most to the cause of reducing the forgone days are training programs that have proven effective.

We should note that the forgone days decreased the costs and thus achieve high productivity.

IV- Conclusion:

Training is important in all institutions, because it develops the production system, therefore, we should not look at training as a routine process serving certain targets, and do not serve the training process outputs (human, material and moral).

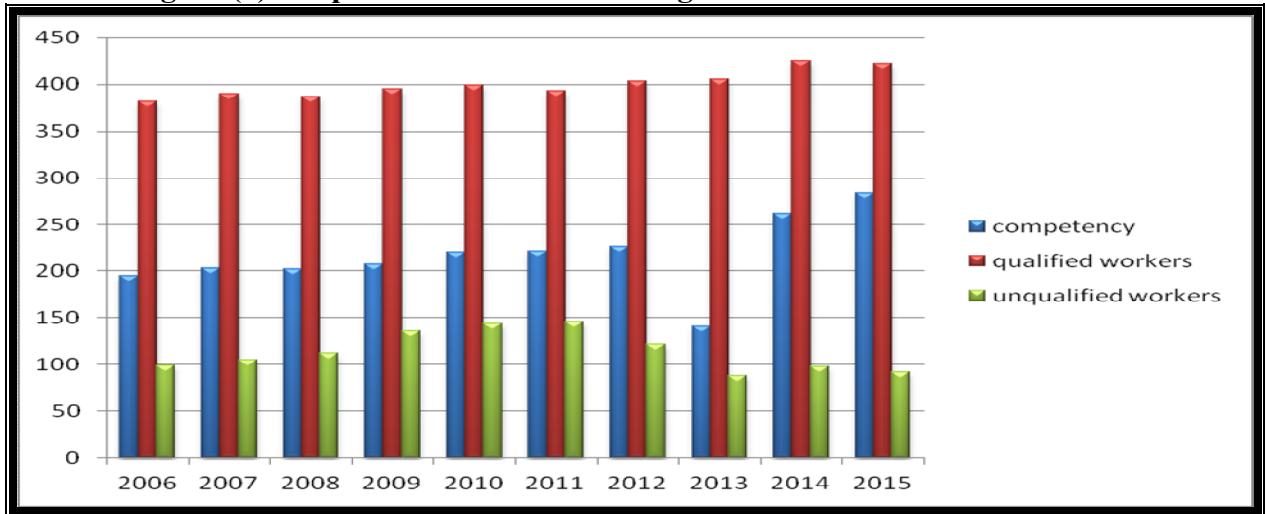
As an organization must concern the training process in particular, and have done through considered a key element to increase productivity and reduce costs, and therefore human resource considered investment rather than a cost.

In light of the above and through a field study, in large global companies, (Sonatrach), we conclude to a set of results:

- The training process is very expensive especially by external training
- the training of human resources in the company is the most important strategy that Take special attention by the top management of the company, in order to raise the efficiency of workers and increase their scientific knowledge;
- The effectiveness of training programs that contribute to reducing the costs resulting from forgone days and accidents at work;
- Training competencies in Sonatrach will allow to reduce reliance on foreign talent competent in the field of hydrocarbons;
- Allow training in the company to keep abreast of technical and technological developments in the field of hydrocarbons.

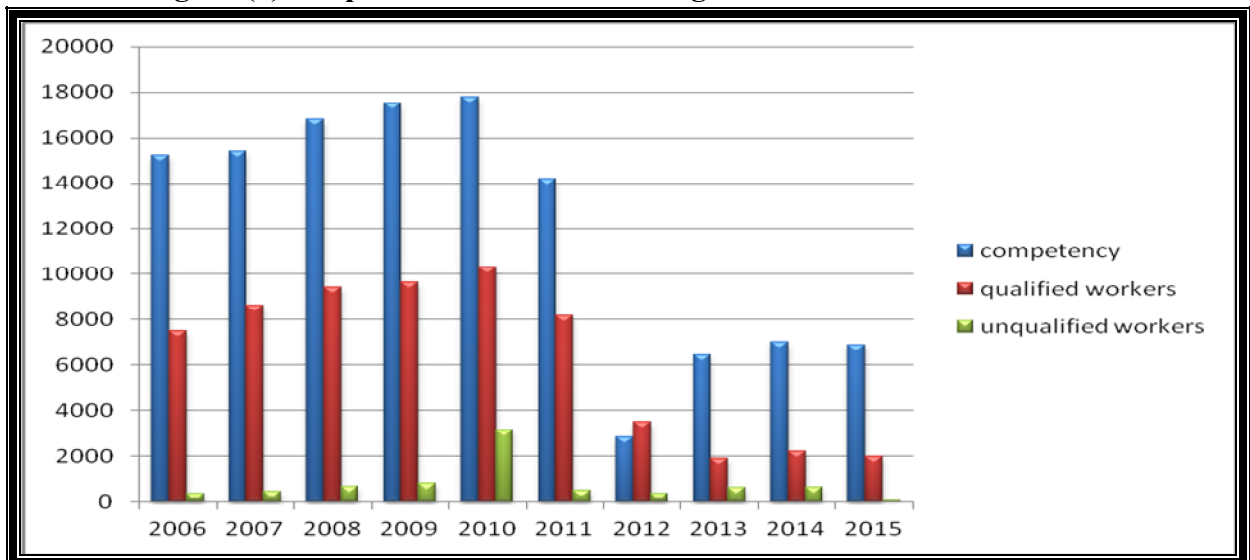
-Appendices :

Figure (1) Graphic describes the training workers in sonatrach 2006-2015



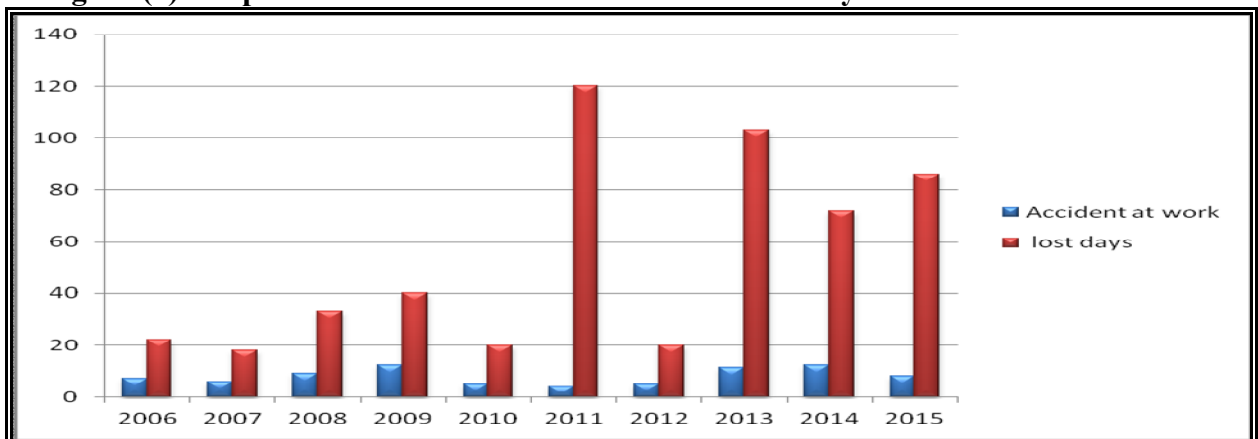
Source: prepared by the researcher based on the annual report of the company Sonatrach 2006-2015¹⁸

Figure (2) Graphic describes the training costs in sonatrach 2006-2015



Source: prepared by the researcher based on the annual report of the company Sonatrach 2006-2015¹⁹

Figure (3) Graphic describes accidents at work and lost days in sonatrach 2006-2015



Source: prepared by the researcher based on the annual report of the company Sonatrach 2006-2015²⁰

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