



OCCUPATIONAL SAFETY IN A SEED PRODUCING COMPANY IN NIGERIA

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ABSTRACT

The occupational and safety provision of a seed production company in Nigeria was reviewed by means of structured questionnaires. The results of the study revealed that awareness on occupational hazards related to seed production by workers was very high (96%) which suggests that the staff have some training on safety and safety measures. Also, the incidence of occupational hazards is very low as 93% of the staff claimed to be unaware of any incident since they joined the company and 81% of those who have witnesses incidence of occupational hazards in the company rated the company's response to such incidence as satisfactory. All the staff (100%) asserted to the availability of safety measures in the company, however only 86% of them agreed that such safety measures were adequate while 14% believe that it should be improved upon. The study revealed that adequate supervision of workers on use of protective wears, first aid boxes and fire extinguishers are carried out. Also, the provision of milk, monthly medical allowance, and free medical care has encouraged the workers to be more committed to work. The environmental audit of the company showed that the building is in good condition and the general yard sanitation is very good.

Keywords: Occupational safety, environmental inspection, seed producing company

INTRODUCTION

Premier Seeds Nigeria Limited is the oldest and largest seed company in Nigeria. The company which was established in 1984 has its name changed several times starting from Agric Seeds to Pioneer Seeds and now it is known as Premier Seeds. The core business of the company is the broad application of the science of genetics and seed technology to provide seeds and services in order to increase the efficiency, productivity and profitability of farmers. About 3,000 tons of seeds are produced and processed annually by the company. The seeds are processed in company- owned seed processing plants equipped with modern, high- capacity efficient scalpers, seed cleaners, seed sizers, grading seed gravity separators, elevators,

seed dressing equipment, manual and automatic weight and packaging machines (Premier seed 2002). The emergence of other Seed Companies has been on the increase recently, thereby increasing the number of workers in the industry. At present, Premier Seed has over 100 employees which include both permanent and casual staff. Therefore the issue of safety and environmental conditions must be accorded great priority if seed business is to be sustained for the sake of development. It is obvious that safety in the work place is supposed to be an issue of concern to all stakeholders in the seed industry (the owner of factories, Government, the workers and the general public) (Igboro *et al.*, 2007). The health and wellbeing of employees is the success of any business or

organization, hence reorganizing the value of a healthy work place will ensure that staff are healthier and happier (Balami, 2008).

In developing countries the health safety regulations are less stringent or poorly enforced because hazard are commonly not well understood (EJF 2000). Exposure to hazard can result from either occupational and /or environmental source. (Langley and Summer 2002).

There is no documented study on occupational safety in the seed industry in Nigeria. Therefore, this study is aimed at determining the extent to which the management of Premier seed has put in place safety and health measure; and also the extent to which they have provided effective and efficient supervision of the workforce to ensure that safety regulations are observed. The study also attempts to ascertain the existence of training programs for workers in order to sensitize them on the need to develop positive safety attitudes and/ or practices at work.

MATERIALS AND METHODS

A research survey was conducted in May 2008 at Premier Seeds Nigeria Limited head office located at Chikaji industrial estate Zaria Kaduna State, Nigeria. The survey was aimed at determining the extent to which the management of the company have put in place safety and health measures and provided effective and efficient supervision of the workforce to ensure that safety regulations are observed. The study also aimed to ascertain the existence of training programs for sensitizing the workers on the need to develop positive safety attitudes and/ or practices at work. In order to achieve these objectives, Survey research techniques using questionnaires was employed for the collection of data on health and environmental issues that affect the staff of the company. A total of 70 questionnaires

which constituted 70% of the total number of workers were administered to only those workers who were interested in responding to the questionnaires.

The questionnaires were administered to staff in different departments of Administration and Accounts, Research and Development, Production, Marketing, Factory, as well as some company drivers and security men.

Discussion with factory workers and some management staff was also employed in gathering relevant information. Information on the environment was obtained from the Department of Health Sabon-Gari Local Government Area of Kaduna State. Univariate analysis involving the use of simple percentage was used to analyze the data and the results were presented in tables.

RESULTS AND DISCUSSIONS

The results obtained from the study (Table 1) indicated that the level of knowledge on occupational hazards related to seed production was as high as 96% of the staff were able to mention at least three various types of occupational hazards and their effects on human health while 4% of the respondent were not able to mention up to three types of hazards. The findings from the study also suggest the incidence of occupational accidents in the company was low because 7% of the staffs were aware of occupational accident since they join the company while 93% of the workers never heard of any accident since they joined the company. Also, 81% of those who have seen co-workers involved in occupational accident rated the company's response as satisfactory while 19% were not satisfied with the company's response to the affected workers. The assessment of the available safety measures on in the seed company from Table 1 revealed that there are some form of safety measure put in place for safety of workers in the company as all the workers (100%)

agreed that there exist safety measures. However, the adequacy of the safety measures was ascertained by only 86% of the respondents while the remaining 14% feel that the safety measures are not adequate.

Table1: Staff awareness, assessment and perceptions of safety measures at Premier Seed Nigeria Limited

Awareness	Response	Respondents (n=70)	Respondents (%)
Staff knowledge on the causes and effects of occupational hazards	Staff that were able to mention at least 3 occupational hazards	67	96
	Staff that were unable to mention at least 3 occupational hazards	3	4
Incidence of occupational accident in the company	Staff that were aware of accidents in the factory	5	7
	Staff that were unaware of any accident in the factory	65	93
Rating of the company on response to incidence of hazards	Satisfactory	57	81
	Unsatisfactory	13	19
Availability of safety measures	Available	70	100
	Not available	0	0.0
Adequacy of the safety measure	Adequate	60	86
	Not adequate	10	14
Importance of the safety measure	Important	64	91
	Not important	6	9
Supervisions at work	Availability of supervisor	70	100
	Non availability of supervisor	0	0
Importance of supervision	Important	20	29
	Not necessary	50	71
Staff Management relationship	Cordial	55	79
	Too strict	15	21
Perceptions of staff to their work	Challenging and interesting	57	81
	Tedious and stressful	13	19

Also, 91 % of the respondent agreed to the need to have safety measures put in place while 9 % of the respondents felt that the safety measures and equipments are not necessary. This result shows that safety measure are adhered to in the of agro input production business than that of agro input sales where studies have shown that most

agro input sales dealers are unaware of symptoms of poisoning from agrochemicals and the first aid instructions for handling such symptoms(Ibrahim *et al.* 2011). The study also showed that 100% of the workers in the factory are working under efficient supervision to ensure compliance to safety rule. However, 71% of the workers feel that

supervision is not necessary as it puts them under pressure while the remaining 29% believe that supervision is not important as shown in Table 1. The study assessed the relationship between the management and staff of the company and also the staff perception to their work. According to 79% of the respondents, the relationship between the workers and management is cordial while 21% of the respondents felt that the management is too strict as shown in Table 1. Also, 81% of the respondents see the work as challenging and very interesting while 19% of the respondents feel that their job is very tedious and stressful (Table 1)

The Environmental Inspection report of the company's premises by the Department of Health Sabon-Gari Local Government of Kaduna State (P.H.C.,(2008) showed that there are enough toilets which are always clean and tidy; very effective and well constructed drainage system, dustbins and incinerator for solid waste. The report also stated that there is pipe-borne water for use by the staff and neighboring villagers; the ceilings, floors, roofs and painting of the structure are in good conditions and the general yard sanitation is good.

It was observed that some of the likely occupational hazards in the factory include noise pollution, shocks, heat stress, seed dressing chemicals and dust from seeds. Inhaling dust and chemicals may lead to lung and skin diseases while machines used in the factory may cause shock, damage of operators body parts and death in severe cases .However, according to the study, there are only very few cases of incidence of accidents since the inception of the company in 1984 and the few that occurred were mainly due to non compliance with the company's safety rules.

In case of any accident, the company has a first aid facility and may also refer the affected worker to a hospital if necessary and

bears the financial responsibility, other safety measures includes the provision of protective wears such as mouth and nose mask filters, hand gloves, rain boots, staff uniform, first aid box and fire extinguisher. Apart from these, there is a monthly medical allowance attached to staff salaries and milk is constantly given to factory staff to help reduce the effects of chemicals and dusts inhaled during factory operations.

All the workers in the factory are working under efficient supervision to ensure compliance to safety although most of the workers feel that supervision is not necessary as it put them under pressure. However majority of the worker see the work as challenging and very interesting because of the management concern on their live and the reward for hard work while the lazy ones feel that the work is very tedious and stressful. The relationship between the workers and management is cordial.

The factory staffs are more exposed to occupational hazards as compared to the other staff in Administration and Account department, Research and development department, Production department and marketing department; however, all the workers are exposed to one form of hazard or the other. Some of the occupational hazard on the farm also includes the use of chemicals, such as herbicides and pesticides during farm operations; biological hazards include snakes / scorpion bites and contact with poisonous plants.

This study confirmed the report of the Primary Health Care Department of Sabon-Gari Local Government which found that protective wears such as mouth and nose mask filters, hand gloves rain boat and staff uniform, first aid box and fire extinguisher are adequate in Premier seed and that the environmental inspection shows that there is adequate water system toilet which is always clean and tidy; very effective and well

drained drainage system; there is provision of dustbin and incinerator for mass disposal of solid wastes; there is pipe-borne and borehole water for use by the staff and neighboring villagers. The ceiling, floor, roof and painting of the structure are in good conditions. The general yard sanitation is also good.

CONCLUSION

This study has shown that the staffs of the company under review are well informed about safety and safety measures in their jobs since almost all the staff are aware of their job hazards, its effects and ways of preventing them. Incidence of occupational hazards was also found to be very low due to efficient supervision and adequate protective wears such as mouth and nose mask filters, hand gloves, rain coat/staff uniform, first aid box and fire extinguisher. The provision of milk, monthly medical allowance, and free medical care has encouraged the workers to be more committed to the work and see it as challenging and interesting. It is therefore recommended that the management should continue to extend its training program to all categories of staff on safety and precautions their areas of work. Appropriate safety precaution guides should be placed in each section of the factory and enforced. There should be regular medical checkup especially for workers in contact with chemicals and dust. Lastly, all other emerging seed companies should emulate and if possible improve upon the occupational and environmental safety policy existing in Premier Seed Nigeria limited.

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