

An Occupational Hazards and Health Related Issues of Cashew Workers in Cashew Nut Processing – A Review

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Abstract--- Nowadays Cashew nut cultivation and processing is a key area of agronomy. One third of the worldwide trading for cashew nuts production is accounted for India. Uncomfortable sitting position and direct touching with nut shell liquid may make the labors exposed to various health issues. Female workers are involved in cashew nut processing unit. This review was envisioned to know the occupational hazards and healthiness factors of women employees. The effort in cashew nut industry is substantially high, musculoskeletal disorder and the cardiovascular stress is also reported. Issues related to dermatological conditions are very much predominant amongst females involved in cashew trading. Female employees found a major division in cashew trading and approximately 90% of the labors in processing units are female. It is majorly reported that women suffer from respiratory problems and Musculo-skeletal disorders are moderately high in the recent scenario of cashew nut processing. Hence, this review provides a survey of occupational hazards, health and environmental issues of cashew workers in cashew industry.

Keywords--- Cashew Nut, Occupational Health Hazards, Dermatitis, Musculo-skeletal Disorders.

I. INTRODUCTION

Cashew employees are working in processing unit under situations that are considered as hazardous. Rather than the cashew factory related issues, employees facing numerous threats which are linked with their job efforts. Cashew employees were frequently unprotected to physical threats such as hotness, injuries, etc. chemical threats such as dermatological irritations, biotic threats due to disturbance of pests, posture threats such as monotonous movement and psychological issues. Work-related health and protection are prime factor of the operations of the workers. It is reported that there are around four hundred thirty million people were suffered by work-related calamities and work-related illnesses yearly. Hence, this review intention is to list the utmost shared workspace threats challenged by the workforces in the cashew industry.

Hazards are categorized into 5 categories. Physical hazards in the framework of the warmth produced by the furnace, dirt rising during processing and conventional holding. Biochemical disclosure of workforces like acidic cashew juice, which in turn creates skin irritations and dryness, poisonous gasses i.e. fumes upcoming from the furnace that causes many respirational ailments and toxic ingestion. Biological hazards comprises of risk from insect pest like mosquitoes, uncleaned washroom creates infections and other infectious syndromes. Ergonomical hazards such as monotonous activities like processing creates joint aches, inconvenient postures creates spinal troubles.

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Psychological factors include strain interrelated jobs, balancing of job and family related commitments where in turn affect the efficacy and productivity of a worker in the cashew industry.

II. MATERIALS AND METHODS

Psycho-sociological hazards makes mental disturbance as well as physical damage to each and every employee. Work-related tension is one of the main hazard for deprived value of life and meager lifespan for workers. Tension arises due to work uncertainty, extensive working periods which are not having appropriate societal livelihood by the proprietors and higher personnel. This type of hazards were reported highly based on ranking of hazards by the workers in their working divisions. The psychological threats deepen the physical problems in physique. Physical threats is rated high in influence when compared to other threats. Physical threats in trading is largely occurred due to hotness and dirt of physical holdings. Amongst, all conventional management of things which creates safety problems and therefore graded top within the physical threats. Monotonous activities and discomfort working situations also create threats to workers.

Biting of insect pests causes skin itching and various communicable viruses. Uncleaned latrines were the main sources of biotic threats for the employees is concerned. Uncleaned toilets is been graded as creating main biological hazard in cashew employees specifically woman labours followed by insect pest bites and communicable viruses. Finally biochemical threats stands graded highly since there is no release of poisonous fumes and various substances are generated from industry. The employees who work in shelling tolerate the eternal fire hotness of burning fluid on their palm. Therefore skin irritation and skin dryness of employees who involved in processing division. Breathing of fumes influences long-lasting respiratory trouble over an extensive period.



Fig 1: Woman working in the shelling section



Fig. 2: Ash used to avoid skin burns



Fig. 3: Skin colour changes due to peeling of cashew kernels

The analysis of the elementary lesions made it possible to pose 110 diagnosis of contact dermatitis (88.39%) with many clinical presentations: inflammatory erythematous lesions, palmar keratoderma (70.9%), skin detachment by chemical burns due to CNSL (30.0%) which is mentioned in [27] shown in figure 2 & 3.



Figure 4: Dermatological problem persistency

One third of the worldwide trading for cashew nuts production is accounted for India. (1) The cashew trading, where raw cashews are converted to cashew kernels, which is the basis of income. The main phases of processing contain roasting, shelling, peeling and grading the seeds based on quality. Most of the employees are females, specifically belonging to the inferior socio-economic status (2). There are recent surveys on the outline of cashew employees, but most of them are concentrating on workers and their well-being factors and only a limited concern about the health-relevant problems.



Figure 5: Red-hot skin during Cashew Processing

The operational environments of cashew employees have been a strategical distresses for extended period. Though, most of the well-being associated concerns appeared to be continued till today. It is essential that appropriate strategical distresses are implemented to progress the well-being situations of cashew employees. The statistical physiognomies of the employees involved in cashew production were stable with regards to earlier information with moderately less existence of the fresh employees. (3) Little back pain, Palm ache, Lap ache and collar ache was the main Muscular troubles accounted for declining demand amongst all the employees are projected in present study.

Most of the female employees squatting on the ground to accomplish jobs. This positions can distress muscles, ligaments and spinal cord. Squatting position applies excessive force on diverse human parts. In processing unit, employees sit without mat on surface with bending posture and eye sight immobile on seed.

Extended time period without even pause, monotonous activities, static posture and lengthy visual attention are communal between employees and leads to musculoskeletal and ophthalmic problems. Payment for processing of kernels are based on the count amount and the left over is based on grading. Earlier review established that nearly 33% of the employees missed break interims and it was much high for woman employees who are salaried on a count amount basis. Prolonged breathing disease was huge amongst all the employees involved in shelling. Breaking the nuts by hitting makes aerosols. The link over the epoch of blossoming and improved figure of allergic asthma cases has been reported (8) and this also leads to air pollution. It is better to fit exhauster and encouraging them to use of masks.

Most of the employees involved in roasting division are accounted for fire injuries. It is carried out at a high temperature to eliminate the wetness. Cashew fluid creates everlasting skin discoloration and irritations. In skin, shelling creates dark acnes and aridness. Hand covers are not preferable for employees when processing cashew. More than 90 of the employees stated health associated issues based on their work. As indicated out by Kannan (1978), one pointer of the environment is the state of health of the employees. The cashew workers are exposed to health risks due to the characteristics of the job. In our country, most of the state governments have expelled container based roasting of nuts which creates air contamination. The heavy pungent emission gas is produced through the roasting process which contaminates the atmosphere. By considering ecological preservation, those works need to follow conservational safety ethics.

III. CONCLUSION

More or less all the works contain some type of threats and these industries were not omitted from threats. Here, the threats are moderately fewer when related to other higher threat works. But it has Physical, Biochemical, Ergonomical, Biotic and Psychological threats to workforces. However threats were divided in this review and it may be coinciding with another. It is the right time for the women workers to take essential paces to exclude the threat of hazards in the cashew factories like wearing hand covers, neat and tidy location plus cleaned toilets, confirming least experience to poisonous gases and providing human values to the miserable workers. Health relevant problems relating to musculoskeletal system, breathing conditions, dermatological conditions and ophthalmic straining are extremely predominant among females. It is rightly needed to consider some remedies in consultation of doctors to safeguard the female workers well-being at job and enhance their livelihood. Thus, this study provides an information about occupational hazards and health issues prevalent to cashew workers.

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