Study on Effectiveness of Training Given to Employees at Sugar Mill

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ABSTRACT

Training presents a prime opportunity to expand the knowledge base of all employees, but many employers find the development opportunities expensive. Employees also miss out on work time while attending training sessions, which may delay the completion of the work schedule. Despite the potential drawbacks, training and development provides both the company as a whole and the individual employees with benefits that make the cost and time a worthwhile investment. Employees with access to training and development programs have the advantage over employees in other companies who are left to seek out training opportunities on their own. The investment in training that a company makes shows the employees they are valued. But to reap the said benefits the training programmes need to be effective and of value to the employees. That is why periodical assessment of the effectiveness of the training programmes is important. This study is intended to assess the effectiveness of training given to employees of a large scale sugar mill. The opinions of the employees are collected through a structured questionnaire by personal interview method. The suggestions of the employees are also sought and they are communicated to the department concerned.

NEED AND SCOPE OF THE STUDY

Need for the study
The study is conducted in a large scale sugar mill in TamilNadu, India. The company is giving various types of training to the employees. The HR department wants to know if the training is useful to them and what are the expectations of the employees with regard to the training programmes. Hence this study is taken to know about the effectiveness of the training given to workers and know their suggestions for improvement

Scope of the study
The effectiveness of the present training programmes are studied and the employee suggestions and expectations to improve the training given are communicated to the HR department

INDUSTRY PROFILE

About Sugar Industry in India:
Sugar consumption rate is highest in India as shown in the statistics received from USDA Foreign Agricultural Service. However, as per production is concerned, India has notched up 2nd position following Brazil, the largest sugar producer in the world. The Indian sugar industry uses sugarcane in the production of sugar and hence maximum number of the companies is likely to be found in the sugarcane growing states of India including Uttar Pradesh, Maharashtra, Gujarat, Tamil Nadu, Karnataka, and Andhra Pradesh. Uttar Pradesh alone accounts for 24% of the overall sugar production in the nation and Maharashtra's contribution can be totaled to 20%. There are 453 sugar mills in India. Co-operative sector has 252 mills and private sector has 134 mills. Public sector boasts of around 67 mills.
India has been known as the original home of sugar and sugarcane. Indian mythology supports the above fact as it contains legends showing the origin of sugarcane. India is the second largest producer of sugarcane next to Brazil. Presently, about 4 million hectares of land is under sugarcane with an average yield of 70 tonnes per hectare.

India is the largest single producer of sugar including traditional cane sugar sweeteners, khandsari and Gur equivalent to 26 million tonnes raw value followed by Brazil in the second place at 18.5 million tonnes. Even in respect of white crystal sugar, India has ranked No.1 position in 7 out of last 10 years.

Traditional sweeteners Gur & Khandsari are consumed mostly by the rural population in India. In the early 1930’s nearly 2/3rd of sugarcane production was utilised for production of alternate sweeteners, Gur & Khandsari. With better standard of living and higher incomes, the sweetener demand has shifted to white sugar. Currently, about 1/3rd sugarcane production is utilised by the Gur & Khandsari sectors. Being in the small scale sector, these two sectors are completely free from controls and taxes which are applicable to the sugar sector.

The advent of modern sugar processing industry in India began in 1930 with grant of tariff protection to the Indian sugar industry. The number of sugar mills increased from 30 in the year 1930-31 to 135 in the year 1935-36 and the production during the same period increased from 1.20 lakh tonnes to 9.34 lakh tonnes under the dynamic leadership of the private sector.

**About Sugar Exports**

Sugar exports from India, the world's second-biggest producer, are set to climb next season as an end of state curbs on local sales sends domestic prices lower and encourages mills to boost overseas shipments. Supply will be available for exports in the 2013-14 season that starts in October, according to Abinash Verma, director general of the New Delhi-based Indian Sugar Mills Association (Isma). Domestic prices in India for white sugar are about 10 per cent higher than futures in London, discouraging exports for now.

Global refined sugar prices have dropped 11 per cent in the past year as oversupply of sweetener overwhelmed processors. India's government said April 5 it will allow mills to freely sell sugar in the local market for the first time in four decades. The crop starts being harvested in India in October.

White sugar futures on the National Commodity & Derivatives Exchange Ltd in Mumbai are Rs 2,928 a quintal ($542.90 a tonne) today, compared with $500 a tonne on NYSE LIFFE in London. The London price is down 4.5 per cent this year after falling 33 per cent the past two years.

Shipments from India have been about 35,000 tonnes since the current season started on October 1 compared with 3.4 million tonnes for the entire 2011-12 season as high domestic prices discouraged exports, Isma estimates. Exports in 2013-14 could be 500,000 tonnes if domestic prices fall below global levels, according to Charlotte Kingsman, an analyst in New Delhi at Kingsman SA, a Lausanne, Switzerland-based research company.

The nation's stockpiles will climb 37 per cent to 9.2 million tonnes by October from a year earlier, the most since 2008-09, said Vinay Kumar, managing director of the National Federation of Cooperative Sugar Factories Ltd. Indian sugar makers were curbed by a policy that set limits on sales by each mill to cap prices, while states fixed cane rates to help 50 million farmers. The government also said it will stop buying sugar from producers at below market prices, with the changes to take effect this season.
Sugar output in India will be 24.6 million tonnes in 2012-13, beating consumption of 22.5 million tonnes, leaving a surplus of 2.1 million tonnes, according to Isma. Production may be as high as 25 million tonnes, Green Pool Commodity Specialists Pty, a Brisbane, Australia-based researcher, estimates. "Uttar Pradesh had a very good crop and Maharashtra wasn't as bad as what people thought," Tom McNeill, a director at Green Pool, said in a telephone interview on April 30. "There were numbers as low as 20 million tonnes for this year and it's going to end up near 25 million, an incredible outcome really, but that's because cane prices have been very good."

About Tamil Nadu Sugar Industry

The Agro based sugar mills play an important role in the economic growth of rural areas with the sole aim to generate large scale direct employment. Apart from that, a lot of indirect employment to rural population is also provided. Tamil Nadu Sugar industry is responsible for about 10% of the total sugar production in India. Majority of sugar units in Tamil Nadu lies with the cooperative sector, with some private players' also gathering momentum.

At present, the sugar industry in Tamil Nadu stands in a total mess similar to that of the other rural industries. The sugar industry had faced a boom in the 1980s but the crisis era started from 1990, all after the economic liberalization. With the surge in the procurement price of sugarcane, surplus production and reduction in the open market sugar price, directed the industry and the sugar factories, thereafter to have a glut of stocks.

At present the Tamil Nadu sugar industry comprises of 41 Sugar Mills in Tamil Nadu, with 16 of them in the co-operative sector, 3 sugar mills in public sector and 22 Sugar Mills in the private sector. At present, around 38 Sugar Mills are operational, while 3 mills viz. Madurantakam Co-operative Sugar Mill (from 2001-02 season) Madura Sugars (from 2002-03 season) and Arunachalam Sugar Mills (from 2003-04 season) have stopped functioning.

The Sugar industry in Tamil Nadu have come out as a tool for economic translation and the Government had therefore decided set up nine new sugar mills in the state. The new mills have been set up following the guidelines and they will function as integrated Sugar complexes. Till now, three projects viz. Sakthi Sugar Mills, Erode, Kothari Sugar Mills, Ariyalur and Rajshree Sugars and Chemicals Ltd., Gingee have been accomplished and commissioned and it is estimated that the rest of the mills will start their crushing operations during the 2009-10 season. The State Government delimitated the Cane areas for establishment of nine new integrated Sugar complexes with different options of co-generation, distillery and ethanol production, tissue culture lab, soil testing lab and bio-composting.

REVIEW OF LITERATURE


The study was conducted to know the effectiveness of training in godrej sara lee ltd. Mainly five factors such as objectives and needs, session voice, training aids, post training factors and performance were taken to measure the training effectiveness of the employees. The opinions of the employees are qualitative in nature. Descriptive research was used for the study. Primary data and secondary data were used for the study. Primary data was collected through questionnaire. Secondary data was collected to know the number and other details of employees working in the organization. Full population was taken as sample. The department contained unequal number of employees.50 employees were selected as samples.

The authors used meta-analytic procedures to examine the relationship between specified training design and evaluation features and the effectiveness of training in organizations. Results of the meta-analysis revealed training effectiveness sample-weighted mean $d_s$ of 0.60 ($k = 15, N = 936$) for reaction criteria, 0.63 ($k = 234, N = 15,014$) for learning criteria, 0.62 ($k = 122, N = 15,627$) for behavioral criteria, and 0.62 ($k = 26, N = 1,748$) for results criteria. These results suggest a medium to large effect size for organizational training. In addition, the training method used, the skill or task characteristic trained, and the choice of evaluation criteria were related to the effectiveness of training programs. Limitations of the study along with suggestions for future research are discussed.


A decade of training evaluation and training effectiveness research was reviewed to construct an integrated model of training evaluation and effectiveness. This model integrates four prior evaluation models and results of 10 years of training effectiveness research. It is the first to be constructed using a set of strict criteria and to investigate the evaluation and effectiveness relationships with an evaluation measure proposed several years ago, post training attitudes. Evaluation measures found to be related to post training attitudes were cognitive learning, training performance, and transfer performance. Training effectiveness variables found to be related to post training attitudes were pre training self-efficacy, experience, post training mastery orientation, learning principles, and post-training interventions. Overall, 10 training effectiveness variables were found to consistently influence training outcomes. Results also reveal that reaction measures and training motivation are two areas needing further development and research. These findings as well as other areas requiring research attention are discussed.

4. Dr. Tej Singh Dr. Rajiv Ratan, Evaluation of Training Effectiveness: A Case Study - International Journal of Multidisciplinary Research Vol.2 Issue 2, February 2012, ISSN 2231 5780

Every organization big or small, productive or non-productive, economic or social, old or newly established should provide training to all employees irrespective of their qualification, skill, and suitability for the job. Training is not something that is done once to new employees; it is used continuously in every all run establishment. Further, technological changes, automation, require updating the skills and knowledge. As such an organization has to retain the old employees. The paper attempts to study the effectiveness of training and its sub-systems in the Income-tax department by using the Mean, Standard deviation, Standard error and „t“ test. The study is based on both the primary and secondary data. The paper also tries to analyse and compare the opinion of managers on the effectiveness of training and its various sub-systems in the Income-tax department.


Knowledge, Skills and attitudes are the most essential ingredient for efficient conduct of business through the human resources of an organization. But the impact of these valuable ingredients is often reduced by lack of effective training program. The research paper tries to highlight the necessity of effective training and after training evaluation in designing and implementing training programs for the employees in the retail sector specifically for Sainsbury’s supermarket Ltd, UK. The main purpose of this study is to find the answer of how training refers to the acquisitions of knowledge, skill and
attitudes. The paper also facilitates the organization to better understand the necessity of post training evaluation leading to effective employee engagement in designing improved training programs to seize the present and future training opportunities.

Objectives
The core purpose of this research is to study about effectiveness of training given to the employees.

The other allied objectives of the study are:

A) To know about how training need assessment is done.
B) To know about how the training objectives are framed and whether these objectives meet the training requirement of the training.
C) To know whether employees are evaluated during the training program.
D) To know about whether methodology used for training is acceptable to the employees.
E) To know about the opinion of employees towards the knowledge and expertise of the trainers.
F) To get suggestions from the employees for improving training programs given to them.

Research Methodology

Research Design
This is a descriptive study

Sampling Technique
Simple random sampling

Sample Size
150 employees of a sugar mill in Tamil Nadu

Type and Source of Data
Primary Data is collected from employees through questionnaire

Tools of Analysis
Friedman test

Analysis and Interpretation
The collected data is tabulated using percentage analysis and Friedman test is run using SPSS to test the various hypotheses formulated. The hypotheses and the results of the Friedman test are presented below.

Overall Rating of Need Evaluation

Level Of Significance: \( \alpha = 0.05 \)

<table>
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<tr>
<th>Parameters</th>
<th>Mean Rank</th>
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<td>Satisfaction with the training needs</td>
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<tr>
<td>Trainers helped to understand</td>
<td>1.90</td>
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<tr>
<td>Training to improve skills</td>
<td>2.17</td>
</tr>
<tr>
<td>Training needs matches with objective</td>
<td>2.85</td>
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</table>

<table>
<thead>
<tr>
<th>Test Statistics(^a)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>150</td>
</tr>
<tr>
<td>Chi-Square</td>
<td>120.969</td>
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<tr>
<td>Df</td>
<td>3</td>
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<tr>
<td>Asymp. Sig.</td>
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</table>

\(^a\) Friedman Test
They above test shows that the asymptotic significant is below 0.05. Hence alternate hypothesis (H1) is accepted. The overall rating about need evaluation among the employees is high.

**Overall rating of objective evaluation**

**Level of Significance:**

\[ \alpha = 0.05 \]

<table>
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<th>Parameters</th>
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<tbody>
<tr>
<td>Clarity of training objectives</td>
<td>1.79</td>
</tr>
<tr>
<td>Related to organizational objectives</td>
<td>2.34</td>
</tr>
<tr>
<td>Training program designed by expert</td>
<td>1.87</td>
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</table>

<table>
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<td>Chi-Square</td>
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<td>Df</td>
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<td>Asymp. Sig.</td>
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</tr>
</tbody>
</table>

a. Friedman Test

They above test shows that the asymptotic significant is below 0.05. Hence alternate hypothesis (H1) is accepted. The above table shows that the overall rating about the training objectives among the employees is high. Hence the employees are satisfied with the Clarity of training objectives, and they are happy that the training programs are designed by experts.

**Overall Rating of Performance Measurement**

**Level of Significance:**

\[ \alpha = 0.05 \]

<table>
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<tbody>
<tr>
<td>Performance measured</td>
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<tr>
<td>Evaluation of results</td>
<td>3.72</td>
</tr>
<tr>
<td>Feedback about the training</td>
<td>4.96</td>
</tr>
<tr>
<td>Improving work knowledge</td>
<td>3.69</td>
</tr>
<tr>
<td>Improving technical skills</td>
<td>5.11</td>
</tr>
<tr>
<td>Changes in attitude</td>
<td>3.87</td>
</tr>
<tr>
<td>Responsibility</td>
<td>4.76</td>
</tr>
<tr>
<td>Increase in productivity</td>
<td>4.08</td>
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<tr>
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<tbody>
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</tbody>
</table>

a. Friedman Test
They above test shows that the asymptotic significant is below 0.05. Hence alternate hypothesis (H1) is accepted. It reveals that the employees are satisfied with the Feedback about the training

Overall Rating of Trainee Profile
Level of Significance: \( \alpha = 0.05 \)

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<th>Mean Rank</th>
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</thead>
<tbody>
<tr>
<td>Related to job</td>
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<tr>
<td>Nature of job</td>
<td>1.25</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Test Statistics(^a)</th>
<th></th>
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</thead>
<tbody>
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</tr>
<tr>
<td>Chi-Square</td>
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<td>Df</td>
<td>1</td>
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<tr>
<td>Asymp. Sig.</td>
<td>.000</td>
</tr>
<tr>
<td>a. Friedman Test</td>
<td></td>
</tr>
</tbody>
</table>

They above test shows that the asymptotic significant is below 0.05. Hence alternate hypothesis (H1) is accepted. It reveals that the employees are satisfied with the way they are being selected for attending the training programmes

Findings
- The respondents strongly agree that the contents of the training programme was designed after understanding their needs
- The respondents agree that trainers helped them understanding the training needs
- The respondents disagree that the training is given to really improve the skills
- The respondents disagree that training needs matches with the objectives of the training programme
- Respondents agree that the objectives of the training programme are clearly told during the training
- Respondents disagree that the training programme objectives are related to the organizational objectives
- Respondents agree that the training programme is designed by experts
- Respondents disagree that Performance is measured before the training, during the training and after the training
- Respondents agree that evaluation results of the training programme are considered in performance appraisal and for promotions
- Respondents disagree that Feedback is provided after evaluations are done in the training programme
- Respondents agree that the training programmes really helps in improving the work knowledge
- Respondents disagree that the training programmes makes them technically competent
- Respondents agree that Training programmes changes attitude and they also agree that they feel responsible after attending the training programmes
- Respondents disagree that the training programme helps to increase productivity
- Respondents disagree that the contents of the training programmes is related to the job
- Respondents agree that nature of job is considered in selecting for a particular training programme
• Respondents disagree that theoretical and practical content is included in training and also disagree that content delivery is interesting
• Respondents disagree that Participative learning techniques are used in training programmes
• Respondents agree that feedback is collected before and after training
• Respondents strongly agree that the trainers treat them well
• Respondents agree that the trainers are ready to clear doubts
• Respondents agree that the Trainers are expert in contents they deliver
• Respondents agree that the trainers have good teaching skills
• Respondents agree that the Trainers have good communication skills
• The employees agreed in similar pattern with respect the training, the design of the training program their improvement in skill after training program and the trainers. This has been verified using Friedman test in SPSS.

Suggestions
• The company should design training programs that will develop the skills of the employees.
• The needs of the employees should be found and then the programs should be conducted.
• They also disagree that the training programme objectives are related to the organizational objectives. This is a major issue to be addressed by the company. The company should do proper training need analysis before conducting the training programs.
• The employees are unhappy in Performance measurement before the training, during the training and after the training. So the performance should be properly measured and rewards should be given based on the performance.
• They say that the evaluation results of the training programme are not considered in performance appraisal and for promotions. So the evaluation results should be informed to the employees.
• They also say that no Feedback is provided after evaluations are done in the training programme. So proper feedback should be given for improvement.
• They are also not satisfied with the theoretical and practical contents that are included in the training programme. The company should take care of this.
• The employees are not satisfied with the methodology used. They also say that Training methods like role plays, case studies are not used and Participative learning techniques are not used in training programmes. So the company should tell the trainers to use new methods of training.
• Teaching methods adopted need to be improved.

References