

THE FACTORY-SAEMAUL MOVEMENT AS A QUALITY-IMPROVEMENT CAMPAIGN IN KOREA.

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要 約

品質管理는 従業員의 自発的参与와 協助 및 従業員多數의 参与가 없이는 成功할 수 없다. 그런데 勤勉, 自助, 協同의 새마을精神을 바탕으로 우리나라 企業에서 實施하고 있는 工場새마을運動은 従業員에 의한 새마을精神의 鼓吹 및 이에 의한 品質動機賦與를 통하여 全従業員의 自発的参与로서 自社製品の 品質向上에 至대한 貢獻을 하고 있으며 特히 作業者에 의한 品質缺陷(Operator controllable defects)을 除去하는데 매우 큰 役割을 하고 있다.

따라서 従業員에 대한 動機賦與의 觀點에서 볼때 工場새마을運動은 全従業員의 自発的参与와 協助를 必須的 要素로 하고 있는 在来的인 品質向上運動과 一致한다고 볼 수 있다.

이러한 趣旨에서 美國의 ZD運動, 日本의 Q.C.서클活動과 같은 在来的인 品質向上運動과 韓國의 品質向上運動인 工場새마을運動을 動機賦與의 側面에서 比較하고 工場새마을運動의 特徵과 實踐方法을 定立하여 보고자 하는 것을 本論文의 目的으로 한다.

FORWARD

Since the Factory-Saemaul movement is one of Korean version of a quality-improvement program which has an effect on nowadays Korean economic development, this paper aims to show how Factory-Saemaul movement has been conducted as a quality-improvement campaign and compare it with the other well-known quality-improvement campaigns such as a Zero-Defects program and QC circle movement.

THE ORIGIN OF FACTORY-SAEMAUL MOVEMENT

The Factory-Saemaul movement in Korean industries are originated from "Saemaul movement" which was initiated and guide-lined by president Park of the Republic of Korea in 1970. In the name of this movement the word of "Saemaul" means a new village, but it implies a better one to be made and also a community with common purpose. Hence the Saemaul movement can be defined as a voluntary effort of an individual or a group of people for a better way of life.

This nationwide campaign is based on the spirits of diligence, self-help, and cooperation of the participating individuals, groups, or units so that they can try to make better living, prosperous community and wealthy nation.

The basic objectives of the Saemaul movement is to improve the living environment and to increase the income of every participants through the spiritual innovation.

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Therefore emphasis was placed on environmental improvement project until 1973 since this nationwide campaign is begun. During this period, the spirits of Saemaul movement are gradually encouraged to the participants through basic environmental improvement projects such as the establishment of village water supply system, sanitation, village and farm road, village assembly hall, village public bath, and public library. And it enkindled a desire for prosperity in the hearts of the people.

From 1974, income growth project such as the mechanization of farming, construction of irrigation facilities, consolidation of farmland, and establishment of Saemaul factory has been emphasized not only in rural areas but also in some of urban regions by instilling an enthusiasm for production into the hearts of peoples.

During this period, Saemaul movement is expanded to the industry, and it begins to call it "Factory-Saemaul movement". While the Saemaul movement in the agricultural, fishery and rural areas has taken the typical pattern of community development projects for improving participant's income, the Factory Saemaul movement has remarkably contributed to increase their company's product quality and production efficiency.

THE IMPLEMENTATION PROCEDURES OF FACTORY-SAEMAUL MOVEMENT

The objectives of the Factory-Saemaul movement is not only to improve production efficiency but also to improve company's product quality through spiritual innovation and environmental improvement based on the Saemaul spirits.

This movement is to stimulate each members of the company to understand that the company's quality reputation is important to his personal well-being, that he can contribute to company quality better in his daily work, and that he can improve his contribution to the company's quality. Thus, from the motivational point of view, Saemaul spirit coincides with a conventional quality-improvement program which is in need of employee's willing acceptance and coordination.

Since Factory-Saemaul movement is designed to attract all employee's attention to improving product quality through spiritual innovation, the first step of this movement is to make clear what the saemaul spirits are and how they should be practiced in the company for individual and company's prosperous.

This is done first to delegate top management or the leader of working group in the company to the Central Saemaul training school designed specially for training them in the Saemaul spirits and its necessity.

After that the transfer training program in the company is conducted by the leader who is finished from the Central Saemaul training school. This transfer training program is designed to secure employee's attention and their spiritual enlightenment based on the Saemaul spirits. As a result of the spiritual enlightenment, employee's heart are to be burned with affections to their company, and the way of thinking and working of the employees are to be changed for increasing their income and welfare.

The second step of this movement is convincing the employee that the company's product quality and quality reputations are important to his own well-being, and there is something he can do to contribute to better quality.

This is done through the step of training employees in how to identify the problem what he can do in his working lives, how to set goals, conduct the planning and analysis, and follow through with action to achieve the planned goals and to hold them by revised controls, and how to use such tools as the Pareto analysis, histograms, cause-and-effect diagrams, and control charts.

As the third step the movement invite the employees to participate in the Factory-Saemaul group

activity to discover causes of defects. A Factory-Saemaul group usually consists of 5 to 15 workers in the same working area depend on the size of working section, and within a company there are 10 to 30 Factory-Saemaul groups depend on the size of company.

In the implementation of the Factory-Saemaul group activities, plan is made by members of Factory-Saemaul group on a voluntary basis to solve such problems with their own effort. However, when necessary or the problem is beyond the members technical or financial capabilities, they are supported by management of the company. But most of the problem is solved by their own effort since the worker has been widely trained in how to use the tools of analysis. Also the Japanese QC circles, Zero-Defects program, and the other conventional suggestion system may be utilized in this step.

THE EFFECT OF FACTORY-SAEMAUL MOVEMENT

The Factory-Saemaul movement in Korean industries have grown very rapidly since it began in 1973. By end of 1977 about 4,000 industries, and over 28,000 of Factory-Saemaul groups had become active. And over 22,000 leaders from every industries including top management had been trained in the Central Saemaul training school, and over 280,000 workers had been trained in such tools as the Pareto analysis, frequency histograms, cause-and-effect diagrams, and control charts.

The savings in costs resulting in those group's activities in 1977 were about 554 million dollars. Such a savings in costs were made not only through a lessening of cost by the reduction in wasted time, materials, expenditures and other cost making factors, but also through a increasing of productivity in every section of an organization by solving quality and related problems within their working area.

From a national angle, cost reduction is a vital factor in raising the standard of living. Lower cost make for lower prices, can facilitate improved quality, and therefore raise and stimulate consumer demand. These reasons support a view that cost reduction through the Factory-Saemaul group activities should be practiced much more strongly and on a much wider scale than it actually is.

The project worked out by Factory-Saemaul groups have reached to enormous numbers. The selected projects (the best cases of success) are made public through the company journals, and the company or the nationwide presentation meetings.

COMPARISON WITH THE OTHER QUALITY-IMPROVEMENT PROGRAM

In a Zero-Defects program, propaganda fills a large place. Posters, company journals and meetings are used for this purpose. The interest of a Zero-Defects campaign is stimulated by rewards given to individuals or to groups of individuals showing the best result. A reward can be in the form of a plaque, a diploma, a parking-place close to the entrance or a lunch together with management.

A Zero-Defects program can also include a so-called Error Cause Removal program. The objective of this program is to get a knowledge of things that might cause errors by giving rewards to people identifying such causes.

The idea of QC circles in Japan was born in 1962. The QC circles consist of workers who after training in analyzing failures carry through quality studies and solve quality problems within their working area. The problems might be presented by management or might be taken up on the circle member's initiative. Both ways are just as common.

The participation in the QC circle activities is voluntary. The training and the work in the circles often take place out of the ordinary working-hours without any compensation than, at the best, the normal

wage. The activities of the QC circles are stimulated by rewards and other forms of attention to workers who have made a valuable contribution in the quality control field.

Within a company there is usually a quality control circles for each production area. The size of the circle lies between 3 and 15 people. Besides quality improvements by solving quality problems, the quality control circles have increased the quality mindedness of the workers.

To compare the motivational ingredients of the above two quality-improvement program, which was given by Dr. Juran, with the Korean Factory-Saemaul movement is as following Table 1.

Table 1. Comparison of motivational ingredients

Elements of the plan	Conventional motivational plans	Japanese QC circles	Korean Factory-Saemaul movement
Choice of projects	Left up to employee to identify his own project	Some projects identified by management ; others identified by the QC circle	Left up to Factory-Saemaul group to identify their own project
Training in how to analyze a project	None provided	Formal training program provided. out-of-hours; voluntary	Formal training program provided. In-duty hours; voluntary
Analysis of the project	By employee himself or with such aid as he can muster; otherwise, by formal suggestion which is analyzed by someone else	Analysis is by the QC circle, out-of-hours; using training tools previously provided	By the Factory-Saemaul group discussion, out-of-hours; using training tools previously provided
Payment for time spent	None	Varies from no pay to full pay for hours spent	Full pay for hours spent
Payment for successful idea	Definite payment varying with value of idea	No payment; indirect effect on company profit and resulting bonus which uses one formula for all employees	Definite reward
Non financial incentives	Opportunity for creativity and recognition; pride of workmanship	Opportunity for training; opportunity for creativity and recognition ; membership in a group; response to company leadership	Opportunity for creativity and recognition; Ceremonial presentation of awards; pride of workmanship

CONCLUSIONS

Besides quality improvements by solving quality and related problems, the Factory-Saemaul movement have increased the quality-mindedness of the workers. Thus it can be said that this movement is primarily concerned with the human side, and it pursue Theory Y on employee attitude toward product quality. Thus the objective of this movement can be said to prevent operator-controllable defects through influence on state of mind.

The method is, as mentioned above, to stimulate each operator to understand that he has a stake in the company's product quality, that he can do something about it, and that he should do something about it through spiritual innovation of the workers. In greater detail, the objectives of this movement can be stated in terms of following specific aims;

- (1) To encourage employees to participate in improving the efficiency and economy of factory operations, and the quality of product.
- (2) To make every employee understand that he, in his daily work, is contributing to product quality and cost, for better or worse.
- (3) To provide means for receiving employee ideas and suggestions on how to improve quality and to lower costs.
- (4) To give them personal recognition for constructive thinking and the very real satisfaction of seeing their own ideas in use.
- (5) To improve employee attitudes by directing their attention to the positive and progressive aspects of their jobs.

In conclusion, the Factory-Saemaul movement can be said as one of the Korean version of a quality-improvement program which has not only effect on nowadays Korean economic development but also the following characteristics;

- (1) Factory-Saemaul movement is a concept of participation from all functions within the company, including the top management.
- (2) Factory-Saemaul movement is a wide assortment of motivational techniques specially designed to obtain employees willing acceptance and coordination based on the Saemaul spirits.

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