

FOOD QUALITY MANAGEMENT

Jagat Bahadur K.C.

INTRODUCTION

People of the whole world have the basic need and right of access to food, which is of good quality, safe and nutritious. Different countries have applied food regulations to govern the quality of food whatever they desired. Codex Alimentarius commission is a unique science based international organization which designs food standards, guidelines and give recommendations playing vital roles in protecting the consumers and facilitating the international food trade in the world.

On the basis of the international food standards food industries produce their products applying good manufacturing practices (GMP) and total quality management practices (TQMP), now a days, have been applied mostly by the product oriented as well as service oriented industries of the developed countries.

Food borne illnesses have become a world wide public health problem. No food is supposed to be nutritious if it is not safe. GMP in food industries starts with hygiene and therefore need codes of hygienic practices. Hazard critical control points (HACCP) is a technique of identifying and monitoring those processing points where contaminations can best be controlled. Thus for producing a good quality food product good food quality management (FQM) system should be applied.

FOOD QUALITY MANAGEMENT (FQM)

Food is essential for all living animals. Human are being very highly developed and conscious habituated to eat selective food items of high quality, prepared and processed by using modern technology. For producing high quality uniform food product needs a very good management system having highly knowledgeable technologist who knows about the quality they want to produce.

First, one should know about what is quality? In a simple sense "Quality is fitness for use" that meets the customers expectations. Quality does not always remain the same. It improves always remaining competitive.

Food quality is governed by the food standards. Thus, a can of tomato (ketchup) in Nepal, can be the same as a can of tomato in India or Canada if the industries have applied the international food standard. There are more than 200 food standards developed by codex Alimentarius, along with labelling and additive standards and other recommendations (FAO-1994:9).

Management means the way one act and work with the employees, with the equipments, processes, suppliers and with the public or customers at large. Thus food quality management meaning the methods one applies in the working system for producing good and uniform quality of food products which is liked and appreciated by the customers. It is the management system and the decision making

process which is used for successful operation of the business for continued improvement in profit making each year.

Total quality management (TQM) is the modern way of thinking and creating quality values to seek business excellence and competitive leadership to satisfy the customer's expectations. Food quality management should always understand that what the customers want is, what the customers should get. (W.A. Gonid, 1992:6).

FOOD HYGIENE MANAGEMENT

"A man is, what he eats" is a proverb very suitable for quality of food. Standard of health indicates the standard of living. Safe and nutritious food helps leading a healthy life. A healthy man/woman can work hard, more perfectly to the nation. Therefore a healthy quality food will always be in demand.

Chances of food contamination with synthetic chemicals (i.e. insecticides, pesticides etc.) and naturally occurring microbes and other filthy materials are a bigger threat to the world's population. About 2 billions of cases each year are estimated to occur due to bacteria (Diarrhoea) and viruses contaminated foods only (WHO). Most of the victims are children under age 5 of the developing countries. Problems of Aflatoxin, salmonella, Listeria, Compylobacter vibrio-microorganisms and so many other harmful bacteria help causing food poisonings and in several cases even deaths.

GOOD QUALITY ACHIEVEMENT

Quality is achieved by top management listening to its advisors and having the will and commitment to the stated policy by assigning responsibility to the responsible employees of the food industry.

The following are some of the good points to be always remembered for achieving good quality food products:

- (1) Management has to define clearly what is needed.
- (2) This message must reach to the responsible staffs so that every body knows what they have to do in their duties.
- (3) There should be the right equipments, processes, tools, etc., which needs to be there to do the right job.
- (4) The right information must reach to the relevant people at the right time.
- (5) There must be a system of management and control.

So the best defence against them is good hygienic manufacturing and processing practices. Application of HACCP system in the food manufacturing industries helps controlling the hygienic management.

ESSENTIALS OF FOOD QUALITY MANAGEMENT

The following points are supposed to be the essentials of food quality management.

- (1) First of all, it should be clear that quality is a desirable characteristics.
- (2) Quality is achieved by prevention but not by appraisal.
- (3) The quality performance standard should be "zero defects" but not only acceptable quality level.
- (4) Quality measurement is by the price of non-conformance, not by indexes.
- (5) Quality is defined as conformance to requirements, not as goodness.

Food quality management is a complex process which embodies between production and consumption in the food chain.

TQM and HAACP systems are best be applied in food quality management. Quality management is developing a conviction rather than commitment and conversion.

FOCUSED QUALITY MANAGEMENT

Food quality management should be focused on the desired needs of the customers. A food technologist or an industrialist should always be conscious about the changing times to meet the global competition in quality of foods and services. Food organisations that do not use the customers driven process improvements, does not survive longer. FQM targets improving quality initiative processes that has the greatest impact on what must occur for achieving and fulfilling the organisation's objectives. Focus of management attention should be to the critical success factors (CSF) which are the key processes focus means the sharpening thinking to a fine point consistent with the organizational objectives. (H.K. Brelin et.al., 1995:14).

PEOPLE AND TEAM BUILDINGS

A team of people are the most important asset for the success of a food firm. Today's food business firm or food industry needs the brains, the ideas, the thought, the actions, the loyalty, the enthusiasm and the interests of all the employees. How the employees are treated, trained, recognised, rewarded, evaluated and listened to them depends the success of the management. The employees should work in a system and they always should be alert on what is going on right or wrong in the system. Plan, DO, Check, and Act (PDCA) system should be applied for generating KAIZEN (improvement) (Motomu Baba 1996:9). Management should recognize the talent and the honest dedication of the employee and should try to exploit his/her ability for the benefit of the industry. Management must be the employee's cheer-leader, ego-builder, champion and supporter. Employees should have a team spirit and the commitment for good quality of food products. The essence of a team is the common commitment for the promotion of the business. The team should perform as individuals with it they become powerful units of collective performance.

The goals and aspiration of a team should be always to help each other and to share their strengths and success together. Strength comes from a team work.

(W.A. Gould, 1992:1).

This kind of commitment requires a purpose in which team members can believe. And the purpose is to "transform the contributions of suppliers into the satisfaction of customers". (H.K. Brelin et.al., 1995:62).

LEADERSHIP'S COMMITMENT AND VISION

Success of food quality management depends upon the leadership and the vision. Relevant changes never occur without an able leadership. Leadership is nothing more than are of finding out the way people are going and then getting out the front. Leadership is the ability to cause others to follow into the areas of uncertainly. Leadership is integral to the total quality improvement process of a food industry. Or we can say that leadership is the driver of quality process (H.K. Brelin et.al., 1995:137).

A leader or a manager has to face or encounter the following problems:

- vision
- skills
- incentives
- resources
- action
- planning
- effective measures

Unless a leader can overcome employees' resistance to change all the improvement efforts he is going to yield less than the perfect results.

About 45 years ago, J.M. Juran the expert of TQM system had informed that a leader should perform the two fundamental tasks it has to get success. They are:

- (1) To prevent change when the change is not wanted to manage the organization in a stable and consistent way.
- (2) To create change when change is necessary, to lead the organization to new levels of performance or success.

A successful leader should show his/her skills and identify what change the organization needs, at the right time, right decision made which shows his ability where the organization is heading. A Capable leader can well lead the enterprise or industry by sharing the following characteristics:

- (1) An organizational vision that is clearly defined at all levels.
- (2) The ability to communicate that vision.
- (3) Members or a team motivated to fulfill the vision.
- (4) Shared cultural values or norms that exemplify the vision.

A leader must know where he is going and that the people should follow him. A successful quality effort must have both leadership and vision. Leadership should always be able to accept the challenges.

SUCCESS OF JAPANESE QUALITY MANAGEMENT

Japanese quality management is an example of success. Japanese goods during the second world war were not of good quality. Now, Japanese goods have become the prestige of the customers all over the world. Japanese people representing only 0.3% of the entire area of the globe and only 3% of the world's population account for 10% of the world's total economic activity. (K.K. Ananda et.al., 1993:3). It is because of the quality products, they are selling according to the customers want. In almost all of the industries they have applied the best quality management system, TQM. They launched the movement of "Zero-defects" to promote the quality. They have adapted the quality culture. They introduced the Dewing Quality Control Award which is now the most sought after prizes among the Japanese firms.

SCOPE OF FOOD QUALITY AND FOOD TRADE IN NEPAL

Nepal is a small land locked agri-economy based developing country having high scope of tea, coffee, spices, fruits and vegetables growing. Having various types of landscape and the climatic conditions all types of fruits and vegetables can be grown all the season depending upon the places. Indian big cities and Bangladesh can be a good market for supplying processed fruits and vegetable products. But it has not yet been successful to establish a continuous market flow because of the lack of scientific knowledge, infrastructure, transportation facilities, market research, product identification and quality etc. But even then, 70% of the industries in Nepal are food based industries. They are supplying their products to Tibet (China) and Northern states of India and even to Bangladesh. Opening of Fulbari Marga to Bangladesh may increase the market flow towards that country. Market expansion is possible if the quality of the food products maintained competitive to the international standard.

Besides that Nepalese food technologists should play a key role of creating and developing special kind of food quality products-based on our typical traditional methods. Introduction of the locally prepared food items like *gundruk*, *sinki*, *titaura*, *masaura*, *chang*, *jand*, *raksi*, *kinema*, *fishcake*, fermented bamboo shoot, pickles and other varieties of dried products etc. can be sold in the bigger market developing the quality and packaging system. But quality must become an integral part of every plan and every project, an integral part of the thinking of each employee. (H.K. Brelin, 1995:146).

Tea, Coffee, Spices (Zinger, turmeric powder, pepper) cardamom etc.) and a varieties of fruits and vegetables and so many other items of foods, processed and prepared taking care of quality by developing and predicting by the organic farming systems, now a days have a bigger market to India and abroad.

- (1) **Rapid technological developments in the last few decades have created new opportunities about food quality in the world. These are the difficult challenges for the food industries of Nepal but they can be overcome if tried to encounter efficiently and effectively to meet the challenges.**
- (2) **The progress of food quality control is determined by the level of technology available, infrastructure and overall pace of the development of the country, Customers, if became health conscious, price conscious, taste, design and package conscious and overall the quality conscious then the progress goes faster in quality.**