

EARRD/DES/ MoWHS Thimphu imparted Training on Total Quality Management (TQM) and ISO 9001:2008 at CST, Phuntsholing w.e.f 27th May-31st May 2014

Engineering Adaptation Risk Reduction Division under Department of Engineering Services from the day of its inception was under pressure to understand the mandate of the Division on quality both materials & product. Although quality has been one of the most discussed topics for quite some time, there has never been any serious contemplation on what quality really is and how it is to be ensured in any organization. It becomes an emerging phenomenon among builders, suppliers and general public as how to attain quality product (infrastructure) and materials; as we were not very clear that quality can only be achieved on total involvement of all right from planning, designing, funding, administrating & implementing, we were either blaming the engineers, workmanship, builders and so on once the product is ready only.

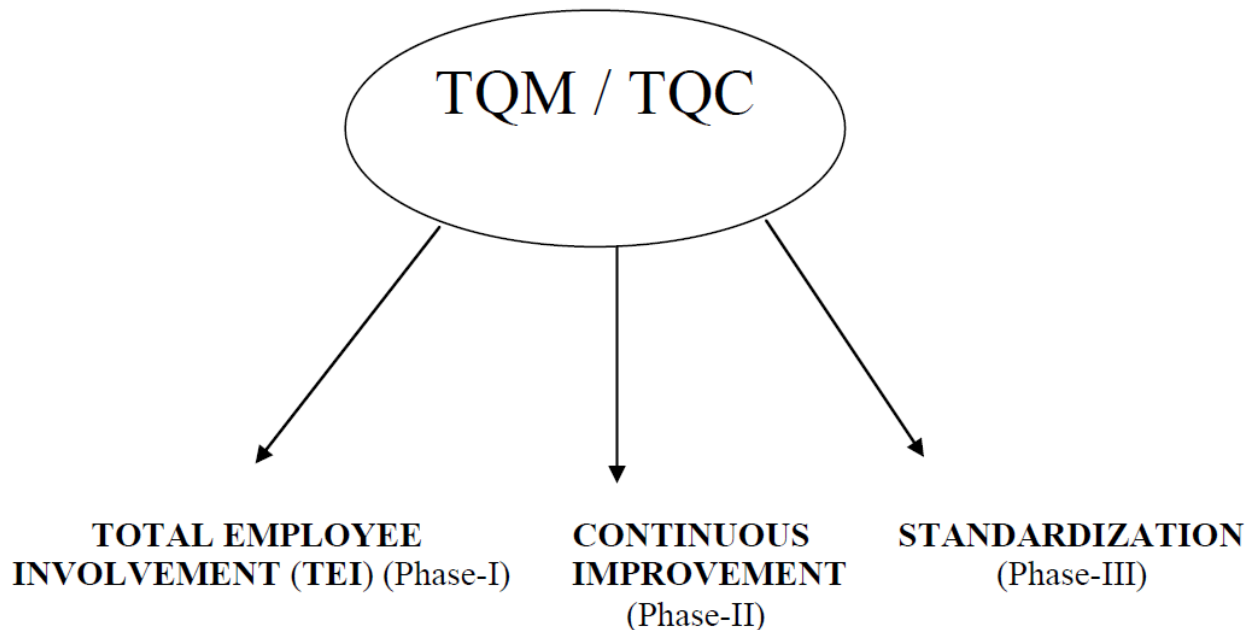
A five days training on Total Quality Management and ISO 9001:2008 initiated and funded by Department of Engineering Services (DES), Ministry of Works and Human Settlement (MoWHS) and organized by College of Science and Technology (CST), Rinchending. The registrar of HEAD CLAIMS and Intellectual Property Facilitation Centre (IPFC) Dr. N. Srilakshmi was invited as the resource person for the training program. About 29 engineers and professionals from various departments (DOR, CDB, DES CST and Dzongkhags) have availed the training. With this training, TQM/ ISO 9001:2008 has been realized as the most recent and effective tool for lapses in an organization.

The participants were familiarized on topics varying from Total Quality Management (TQM) to certification criteria through practical exercises. The participants have been trained on the various clauses of the ISO 9001:2008 and processing for ISO certification. Participant have realized and understood that quality can be achieved at site of construction if the three pillars of TQM are implemented diligently by the organization. Participants are now confident that site specific program Flow charts and checklists in harmony with all stake holders is mandatory to set for checking each & every step on construction by the responsible officials; so that the frequency of site visit by the govt. engineers can be reduced and quality product is achieved as desired accordingly.

ISO 9001:2008 is a standard developed in 2008 by the International Organization for Standardization, a worldwide federation of national standards bodies (ISO member bodies). The participants were trained in depth about the various aspects of the standard such as Quality Management System, Management Responsibility, resource management, product realization and, measurement, analysis and improvement. Statistical tools and other tools necessary for the certification of any organization were also imparted to the attendees of the training.

With this training the participants shall be able to implement many aspects of the training such as the three pillars of TQM, Total Employee Involvement, Continuous Improvement and Standardization. It was made clear to the participants that, quality can only be delivered if all three pillars of TQM are fulfilled.

THREE PILLARS OF TQM



Although we generally emphasize on continuous improvement (Phase II) & Standardization (Phase III) in the Construction Development in our country we tend neglect the most important 1st pillar i.e. Total Employee Involvement (TEI).

1. TQM AS PHILOSOPHY

Total Quality Management is concerned with the integrating of all the efforts in the organization towards quality improvement. Quality development and quality maintenance to meet full customer satisfaction at economical levels. Productivity used to be improved by enhancing quality of products, services and all out activities. Total quality efforts enhance quality of work life, employee satisfaction through participation and involvement and consequently the image of the organization.

TQM / TQC

Total quality management is an integrated organizational approach is delighting customers (External as well as internal) on a continuous basis.

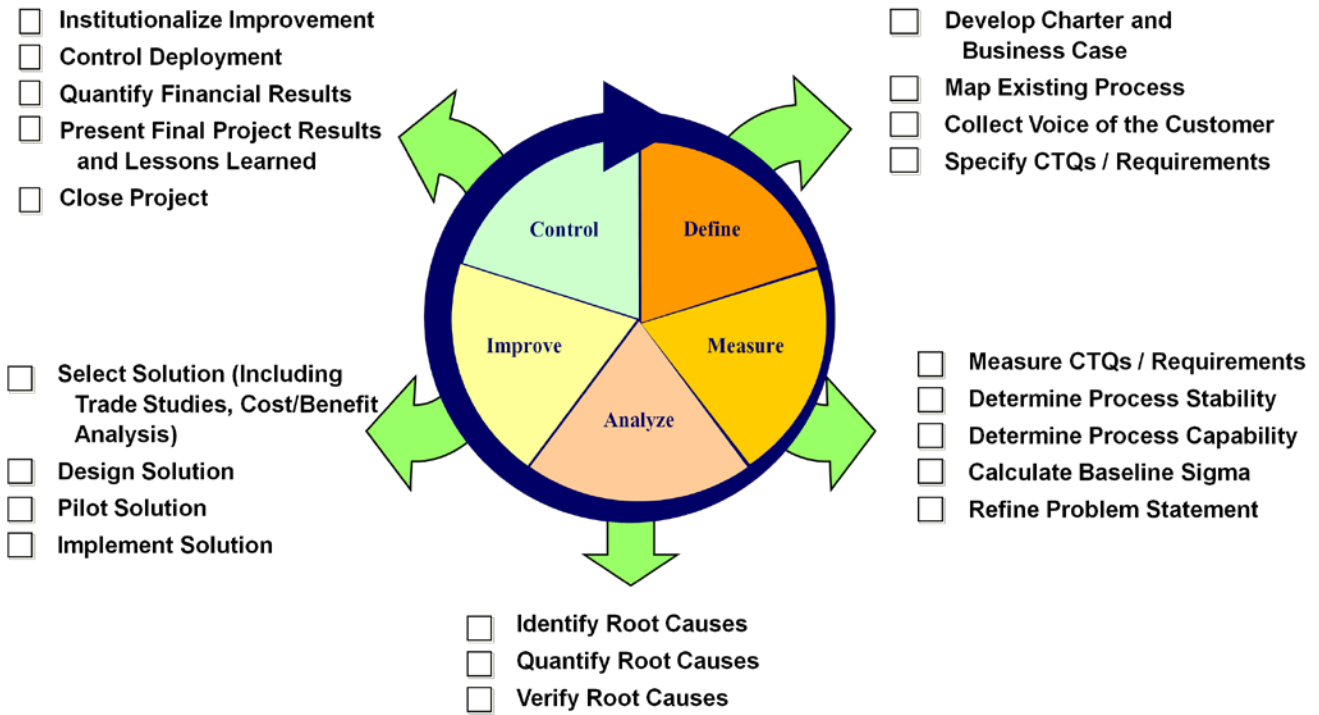
The results of TQM are:-

- Committed employee
- Improved productivity
- Reduced costs
- Improved certainty in operation
- Improved organization
- Dedicated management
- Increased employed participation

However, the only way to achieve these results is through commitment by management, starting with the top management. TQM must be management lead, company-wide in implementation, "dedicated to continuous improvement, and the responsibility of every employee.

One of the successful dynamic processes involved in TQM is DMAIC

6σ DMAIC Process



DMAIC = Define, Measure, Analyze, Improve and Control



Participants clearing doubts during practical demonstration dynamic processes and house keeping at construction site



Participant involved in group exercise to prepare process flow chart of construction company



Group photo of the participants with resource person, Director CST and Director Department of Engineering Services, MoWHS