quality
india

Excellence:

The New National Ethos

11th National Quality Conclave
19th - 20th August, 2016,
Hotel Le-Meridien, New Delhi
Theme: "Improving Quality for Our 1.2 Billion Citizens"

QCI is playing a pivotal role at the national level in propagating, adoption and adherence to quality standard in all important spheres of activities including education, healthcare, environment protection, governance, social sectors, infrastructure sector and such other areas of organized activities that have significant bearing in improving the quality of life and well being of the citizens of India.

QCI has been taking initiatives to promote the cause of good Governance, Empowerment and Quality of Public Services. QCI is also entrusted with the responsibility of carrying out the National Quality campaign of Government of India, in the sectors such as education, healthcare, environment protection, governance, social sectors, infrastructure sector etc.

We welcome Sponsors and Speakers for supporting us in the Conclave.

REGISTRATION OPENING SOON!

The space for Stalls can also be booked.

Important Highlights - The 11th National Quality Conclave:

- The two days event is expected to enhance awareness on the aspects that go into improving "The Quality of Life" in general through speaker presentations & two way discussions.

- The event will showcase innovative services, programmes and best practices on Quality. It will be surrounded by the theme to support quality initiatives for the future.

- The event will comprise of a large number of delegates from all walks of life, pan-India, and help to assimilate learning from national and international experts.

- The event will be attended by 1000+ quality professionals.

- It will facilitate a forum to understand how organizations are using quality tools for improving performance.

- It will create an occasion to network with leaders of quality.

- The event should not be missed by anyone who is keen to drive forward the quality agenda of our country where participants will have the opportunity to learn on the latest Quality trends surrounding multiple sectors.

Demonstrate your Commitment to Quality & join the Conclave now!
Registration opening shortly!

FOR DETAILS CONTACT:
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Message

Dr R P Singh
Secretary General
Quality Council of India

Dear Quality Professionals,

I am pleased to apprise you that we have taken deliberate route as far as our development across various segments is concerned. We are committed to make sure that we not only grow in size and number but the quality too gets an impetus. Good quality mindset needs to be strengthened. We not only plan to bring quality infrastructure across all the sectors, but are trying our best to bring the quality standard right from the grassroot level itself. The service sector in the country has witnessed an incredible growth and we further plan to bring 1.2 million MSMEs under the umbrella of quality standard in the coming years through Zero Defect Zero Effect Maturity assessment Model as a part of Make in India campaign. Though it's a huge ask, we are sure to achieve it with having a positive attitude.

Since last year, we have successfully channelized our focus in improving quality level and are excited to see the momentum as the arena of new schemes and programmes has gone up. We are quite hopeful and committed to take it to the next level in the near future.

The initiatives taken under 'Make in India' campaign will certainly push the economy forward as they are being formed keeping the quality factor in view. It will certainly send a positive signal to foreign investors to do business in India with initiatives such as ZED, Skill India, Digital India and Swachh Bharat Mission.

QCI has been recognising organisations for their efforts towards quality improvement through its QCI-DL Shah Quality Awards. Like every year, this year also many selected organisations will be duly awarded for their efforts. I do look forward to these organisations sharing their know-how and expertise with others.

You may be aware that every year since 2005, QCI has been organising a National Quality Conclave (NQC) to highlight our focus areas and promote quality in all spheres of life. This year we are conducting the Conclave from August 19-20 at Hotel Le Meridien, New Delhi. The theme of this 11th NQC is: "Improving Quality for Our 1.2 Billion Citizens". The best minds from the country as well as from abroad will share their respective views. I, on behalf of QCI, invite you all on this grand occasion to be a part of a continuous transformation process, which is gradually and steadily gathering momentum in the country. Your valuable feedback and suggestion to this initiative is welcome and will be highly appreciated at various forums.

Since the response from industry, partners and institutions was simply great during the last Conclave, we hope the same from them this year too with more participation. We shall soon be coming out with various reports about the new initiatives we have taken in completing a Pilot on ZED, Swachh Survekshan (under MoUD) and also grievance data analysis report under DARPG. Keep visiting our website and participate in our mission to improve quality of products, processes and services in India.

Jai Hind

contents

"Quality means doing it right when no one is looking"

- Henry Ford

06

19

38

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Accreditation of Business Membership Organizations (BMOs)
(For Industry Associations / Chambers)

Prominent Accredited Industry Associations /BMOs

Grading

I am SME of India -Integrated Association of Micro, Small & Medium Enterprises of India

ALEAP — Association of Lady Entrepreneurs of Andhra Pradesh

IIF — Institute of Indian Foundrymen

COSIA — Chamber of Small Industry Associations

IIA - Indian Industries Association

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- Accreditation standard **aligned to International Best Practices**
- Standard developed in collaboration with **Ministry of MSME, SIDBI, & GIZ (German Development Corporation)**
- Provides BMOs with a framework to plan, establish, operate, monitor and improve services
- *BMOs grading is based upon four parameters i.e. Governance, Services & Performance Measurement, Operations and Reviews – SILVER , GOLD , DIAMOND grading for prominent BMOs*

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Benefits of Accreditation

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Benefits in Accessing Government Schemes & Grants

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Creating Mechanism for Planning, Measurement, Review and Continual Improvement

Aligning with international practices

Star Grading – reflecting accountability to stakeholders

Details can be accessed at http://nabet.qci.org.in/BMO/.

For further details please contact - NABET, Quality Council of India (QCI), Institute of Town Planners India, 6th Floor, 4 A, Ring Road I.P. Estate, New Delhi - 110 002, India | **Phones: 91-11-23323416-20**

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Make in India: Importance and Relevance of Quality Management Systems

It has been over a year since our beloved Prime Minister Shri Narendra Modi gave us the mantra 'Make in India'. It's not just a slogan but a philosophy which is being propagated by the current Central Government under his leadership. Through this article, I have made an attempt to interpret the meaning of 'Make in India' as a Quality Professional and have tried to highlight the challenges and opportunities in terms of 'Quality' presented to the Entrepreneurs and Future Managers.

By | Manoj Karkhanis
Multiknack Consultancy Services
(QCI–Life Member)

'Make in India' is an initiative taken by Hon'ble Prime Minister of India, Shri Narendra Modi, with an aim of creating millions of jobs in India in five years of his tenure. His approach for this is to ease out processes to do business in the country. This is expected to attract overseas companies to set up manufacturing units in India with an intention of creating jobs here and also make world-class products available to the consumers from all across the globe, including the local Indian consumers. This is also expected to encourage domestic companies to increase exports of their products and services by adopting world-class technology and knowhow for offering world-class products.

Expected outcome of this initiative would be a double digit GDP growth and increase in the Tax Revenue for the Government by producing products (Goods and Services) that meet high quality standards and have minimum impact on environment. It is also expected to foster innovation, protect intellectual properties and enhance skill development.

But a question is always asked by the opposition that is it a new concept? It certainly isn't. We have seen 'Make in India' happening when Colour TV Technology was introduced in India in early 1980s. Television manufacturers were enthused to get the Colour TV manufacturing technology from Korea (Samsung/Lucky Goldstar), and Germany (Grundig) in as early as 1982-83 and later from Japanese companies such as Sanyo, Toshiba, Sony, Akai, National Panasonic, etc. Leading brands of that era such as Bush, NELCO, Crown, Onida, Televista were quick to grab the opportunity while newer brands such as Videocon, Orson were quick to establish themselves in Indian markets. The same trend was also observed in automobile industry when Suzuki collaborated with Maruti Motors to form Maruti Suzuki which made a cheaper and better option of cars available to Indian consumers. For the first time, they got a chance to own a car other than Fiat/Premier, Ambassador and Standard cars. The same trend was also seen in two-wheeler markets when brands such as Ind-Suzuki, Hero-Honda and Yamaha posed a great threat of getting almost wiped out to the existing two wheeler brands such as Bajaj, Enfield, Yezdi, etc. Bajaj was quick to respond to this threat by signing a 'Make In India' agreement with Kawasaki of Japan. This era saw technologies and knowhow being transferred to Indian companies by their foreign partners. In a way, this was the beginning of 'Make in India'.

But, PM Modi's 'Make in India' differs with the earlier version in a big way. In 1980s, old technology was transferred to India, to extend the 'Product Lifecycle' of the products that had reached 'decline phase' in the other markets. The colour television, car and two-wheeler models that were introduced in India in those days were three to four years old in the local markets of the respective countries. Modern day 'Make in India' expects the global players to introduce modern or even future technology to the Indian manufacturers and technocrats. This is because the Indian Manufacturers have proved their mettle not only by adopting the newer technologies and knowhow but also by developing newer indigenous models based on those platforms which were made available to them. Today, they have also understood the difference between 'Made in India' and 'Make in India'. This difference between 'Made in India' and 'Make in India' is the basis which might swing the outcome of this populist slogan between success and failure.

Made in India v/s Make in India

Made in India is a situation in which, the products are produced by the Indian manufacturers using available technology and knowhow. The products are accepted only if they meet the

requirements of the overseas customers. 'Make in India' on the other hand, expects the latest technology and knowhow to be provided by the overseas principles and Indian manufacturers are expected to manufacture products meeting their requirements. Some Indian Technocrats and Researchers are geared up to transfer the knowhow into a future technology and are ready to claim intellectual rights by taking patents of the technologies and manufacturing processes. These manufacturers and technocrats are aware of the fact that the technology and knowhow will be transferred to them only if their financial and other capabilities, needed to establish manufacturing facilities in India, will meet the requirements of their foreign collaborators. They are also aware of the fact that 'Make in India' has also thrown up some challenges at them and at our Government.

Make in India: Challenges

The challenges posed by 'Make in India' begin with understanding the needs and wants of the global consumers correctly and catering to the specific needs and wants (requirements) of 'Aware Consumers' who may be in any part of the world. These customers are so aware that they know what exactly they want and where on the earth will they get it. Making the products to match their requirements is not easy. It requires having knowledge of their culture, lifestyle and psychological set up in order to produce exactly what they are looking for, in addition to technological and process capabilities.

The other challenge is to match the reducing turn-around time which has been possible because of the information highways and faster modes of transport. This has made it easier for the competitors from other countries to respond to an enquiry placed by a prospective buyer located somewhere in the real world, using virtual world of Internet. This is an advantage if used properly and a threat if exploited for online frauds. The manufacturers in India are expected to respond wisely and carefully, yet quickly, to this.

Meeting the promised deadlines is yet another challenge faced by the manufacturers. Ease in manufacturing the products and/or services is very essential for this. Optimisation of Manufacturing processes may be achieved through Quality Management Systems. While doing this, the manufacturers will have to ensure that they are offering competitive products and services of a globally acceptable quality at an affordable price.

While on one hand, we have some challenges for the entrepreneurs, on the other, we also have quite a few challenges for the Government of India as well as the State Governments and it's not just restricted to provide ease of doing business. It encircles lot of matters pertaining to infrastructure development as well as changing the overall culture of the people in the country.

> " *We not only have better roads now, but also have faster vehicles – both, commercial and public transport. Governments (State Governments and Central Government) are taking adequate steps to improve the availability of clean water for agriculture, manufacturing as well as for human consumption.*

Improving Scenario in India

It is an undisputed fact that the roads, rail network and development of ports in the country are very important for transportation of raw materials as well as semi-finished and finished goods. Availability of water and electricity is equally important for manufacturing sector, as much it is important to agricultural sector. Till recent past, it was not a very encouraging scenario on the infrastructure development front; however, the scenario is changing very fast. We not only have better roads now, but also have faster vehicles – both, commercial and public transport. Governments (State Governments and Central Government) are taking adequate steps to improve the availability of clean water for agriculture, manufacturing as well as for human consumption. Round-the-clock availability of Electricity for Industrial and agricultural use surely needs to be ensured and the steps are being taken to improve this too. Environmental Balance is also being maintained while developing the infrastructure. Still, it's a long way to go.

Government of India has also undertaken some initiatives for Skill Development Programmes. This includes establishment of National Skill Development Authority (NSDA), which was established in 2013 and is an autonomous body of Ministry of Skill Development and Entrepreneurship. NSDA has been established to coordinate and harmonize the skill development efforts of the Government and the private sector to achieve the skilling targets of the 12th Plan. Similarly, National Skill Development Corporation (NSDC) is a Not–For–Profit company set up by Ministry of Finance

under Section 25 of Companies Act. It is one of its kind of 'public-private-partnership organization' under the Ministry of Skill Development and Entrepreneurship, which aims to promote skill development by catalyzing creation of Vocational Training Institutes to impart quality vocational education. Government of Maharashtra has also taken an initiative to promote skill development through its 'Modular Employable Scheme' (MES) wherein the Vocational Training is provided to School Leavers, Existing Workers, ITI graduates etc., to improve their employability by optimally utilizing the infrastructure available in Govt., private institutions and the Industry. Existing skills of the persons can also be tested and certified under this scheme. MES is also expected to build capacity in the area of development of competency standards, course curricula, learning material and assessment standards in the country.

The systems for putting Financial and other resources to better use are also being reviewed by the Central Government. Re-auctioning Mobile Spectrums and Coal Blocks, Review of Fiscal and Monetary Policies, Restructuring of Planning Commission are just a few examples of Government's intention to bring about major policy changes to ease out the processes for doing business in India.

Modern-day manufacturers and entrepreneurs are more committed to provide better quality products to their customers. Kanban, Kaizen, Six Sigma, 5-S techniques, for establishing and improving quality are not new to Indian entrepreneurs. Many Indian organizations are also acquiring certificates of compliance for Quality Management Systems by adhering to International standards such as ISO 9001:2008 / ISO 9001:2015.

'Make in India' is likely to throw some excellent opportunities at the Indian industries that are interested in seizing them. Some of them include protecting Research and Development by Patents and Intellectual Property Rights, introduction of new technologies in their manufacturing units and technical knowhow through collaborations with the overseas companies, creating strategic advantages through mergers and acquisitions, increasing the Installed Capacities for achieving better economies of scale. It is also likely to provide an opportunity to understand global perception about 'Quality', which may be different than the Indian consumers which they have served for all these years. To seize these opportunities, there's a need for a Quality Management System in every organisation.

Importance of 'Quality Management System (QMS)'

Quality Management System is not new to us. We all have grown up hearing the story of Lord Rama and the tribal woman named Shabri. She tasted each and every fruit that she offered to Lord Rama, throwing away sour or infested fruits and keeping only the sweet ones which she then offered to her deity. In a way, she did 'quality control' by segregating 'good products' from 'bad products'. Over a period, we Indians forgot this culture of offering the best to others and '*Chalta Hai*' culture took over. We also forgot that the customers come first, business takes place later. It took some visionaries such as Walter A. Shewhart in early 1920s and later, during and after the World War-II; professionals like Joseph M. Juran and W. Edwards Deming mentored by him to teach us modern Quality Management Systems.

Today, we know that a good QMS optimises the processes. Optimised Processes lead to reduction of wastes and waste of raw materials, time taken by non-value adding processes, unsold stock locked as inventories, etc. Reduced wastes also increase process efficiency. Increased efficiency reduces costs, reduced costs help in competing in global markets by offering competitive prices. At the same time, it also meets customers' requirements.

The importance of the Quality Management Systems has four facets. To customers, the Quality Management Systems are important as they have very specific needs and wants about the generic products and particular brands in the generic product categories, they want hassle-free services from the products and services that they purchase and the quality products offer higher value for money. The company wants it because poor quality pushes the costs upwards which the stake holders wish to bring down and better quality is usually associated with better market share. Every employee wants to be proud of their work, experience lesser hassles at the workplace and lesser work-related stress while earning an extra buck as an incentive. The Government expects quality products to be delivered where they matter the most, viz. pharmaceuticals, airlines and automobile industry, chemical industries, etc., where the 'Quality' is synonymous with regulatory requirements.

Meaning of Quality

Quality has different connotations. When you buy a product such as an electric bulb, it is 'fitness for use'. When you avail a courier service, it is service delivery parameters which decides the quality of the service; when you buy a product like a television, automobile, or some machine, 'Quality' means defect-free service, when you buy a product such as a mobile phone, a software or services of a travel agent or a hotel, it means presence of value in terms of features or freebies; when you buy a product such as an automobile tyre, it means reduced frequency of replacement, rework/repairs (re-threading/punctures). Thus, 'Quality' means different things to different people when they buy different products. Therefore, having a common definition of 'Quality' is difficult. But the International Standard ISO 9000:2015 gives one such definition which is widely accepted in over 160 countries. It says that the quality means the degree to which a set of inherent characteristics of an object (product, service, process, person/organisation, system or resource) fulfils requirements. Quality results in reduced customer complaints and reduction in process variation, leading to customer satisfaction.

On the other hand, the 'Quality Management System' is a method for ensuring that all activities necessary to design, develop, produce and install an object are effective and efficient with respect to the system and its performance. It is also a process of understanding the customers' needs and expectations (requirements) about the object; it's Quality, and optimally utilizing the resources that are required for producing the objects which will meet these requirements.

Elements of Quality Management Systems

A good Quality Management System (QMS) is a result of meticulous marketing efforts to understand the exact needs and wants (requirements) of the customers, designing good 'Marketing

Specifications' based on the identified requirements, and manufacturing a product that will meet these requirements with resources which are used optimally, with an objective to achieve customer satisfaction. Internal and external non-conformance management is also a significant part of this Quality Management System.

Essentials of the QMS

A good Quality Management System must have an established 'operational integrity' that the QMS is effective in an organization. This integrity is supported by three pillars of the QMS. The first pillar is 'Documentation' wherein the scope of the QMS, Quality Policy, Quality Objectives, Organizational Processes that are essential to enhance customer satisfaction and their interactions, etc. are documented. The second pillar is 'Implementation' wherein the QMS is implemented in an organization at every level from top to bottom by determining and providing the persons necessary for the effective implementation of its QMS and for operation and control of its processes. The third pillar is 'Demonstration of Effectiveness' which is demonstrated either through observations or through documentation or through both.

Advantages of a Good Quality Management System

A good QMS provides better consistency. It means, the goods and services are without any variation between the two products of the same category. In simple language, it means that if you buy four tyres for your car, you will find all the four tyres exactly the same. Since the QMS expects everybody to be involved and also lets everybody know about their roles, responsibilities and authorities, it makes employees more responsible and accountable to their own job within the organization. One of the objectives of a good QMS could be to identify the wastages. When such objectives are established, the QMS ensures better utilization of time and resources. This is possible through meticulous monitoring, which also leads to cost reduction due to monitoring.

Since the QMS is aimed at enhancing Customer Satisfaction, satisfied Customers lead to repeat business thereby resulting in overall increase in profits. Getting the QMS certified from an accredited third party also earns international reputation for the organization.

Delivering Good Quality

Delivering good quality is a result of consciously performed activities. It begins with precise marketing activities, wherein, the customers' requirements are clearly understood and organization's capabilities are clearly communicated to the customers. Sometimes, awareness programmes for customers are carried out to establish proper two-way communication between customers and the organization. The designs, performance and reliability of products and services are improved based on the feedback received from the customers.

Thus, it can be seen that the customer is at the centre of the QMS activities. This message must be clearly sent within the organization because any organization grows when it has more and more satisfied customers. Once this philosophy is percolated within an organization, it leads to 'Quality Culture'

in that organization. The organization then strives hard to ensure that the customers are satisfied and not merely for profit maximisation. Profits keep rising as a result of good quality of the products and the services of the organization. The perception about the 'Quality' is improved by acquiring a Third Party Certification.

Is Quality Costly?

Offering Quality Products is a business process in which the customers come back, not the sold goods. Quality can never be costly, rectifying the mistakes is. Hence, it is better to prevent the fire before it catches on, than to become a fire fighter.

Cost of Quality

Many entrepreneurs and managers think that the cost of quality is huge. But it's a myth. The fact is that rectifying a mistake is more costly. Online consumer forums are full of such discussions where the customers are expressing their dissatisfaction clearly over various issues pertaining to complaints about the products. The cost of rectifying such mistakes once the goods reach the customers' place is supposedly 10 times higher than rectifying it before it leaves the Organization's premises. All organizations strive hard to retain customers for lifetime. The lifetime business value of a customer is what the most organization aim at. Dissatisfied customers are lost forever. Cost of Poor Quality also needs to take into consideration the unrealised business from lost customers due to organization's errors.

Relevance of QMS in Make In India

A good 'Quality Management System' is very important for all future managers and entrepreneurs who wish to take-up 'Make In India' challenge. QMS will surely help them control variation in products, processes, raw materials used etc. It will also help in reducing the wastes and uses the resources optimally. It will also optimize the costs thereby helping the organization to become competitive in the International Markets and building reputation as a supplier of quality products which reduces first party and second party inspections/audits. Since the products are accepted easily as a result of good quality, the organizations get prompt payments. Therefore, it can be said that QMS is utmost important for any organization to Make in India.

To summarize, it can be said that Make In India has surely given a dream to the entrepreneurs and managers to pursue in order to make India one of the global leaders in trade and Industry. It would be imperative for all the political parties to rise above party politics; rather than fighting over credit for Make In India, they should strive hard to provide better infrastructure to our entrepreneurs. It would be essential for the entrepreneurs and managers to pursue this dream by changing their own attitude towards 'Quality' of the goods and services that they are set to offer to the world through 'Make In India' initiative of Prime Minister Shri Narendra Modi.

(Mr. Manoj Karkhanis is the Proprietor of 'Multiknack Consultancy Services'; the Mumbai based organization providing consultancy services to MSME Units, Healthcare Organizations and Educational Institutes; since August 2002. He may be contacted on consultant@multiknack.net for sending the feedback about this article.)

Quality of Life
(World Transformation Model)

From this moment onward, the quality of life of yours, your near-dear ones', their near-dear ones' and so on shall improve exponentially. This is the fact as trust leads to truth. This is a breakthrough for the humanity. Life of entity means existence for its society and the entity varies from an individual, family, group, organization, country, and civilization to the world level. An entity is living a quality life when it contributes to its society.

By | **Vishal Gupta**
   Industrial Services, Manager (Projects)
   (QCI–Life Member)

Quality of Life is the enjoyment an entity receives while living the life. Life is ever-changing and never ends. Real enjoyment lies in healthy and happy life when the resources are shared among the society members. Quality means:

Q	–	Questioning your desires
U	–	Understanding your desires
A	–	Accessing your level
L	–	Learning from others
I	–	Integrating & Implementing
T	–	Transforming
Y	-	Yearning

The life is not an abstract matter and it has a meaning for each of us. So, it is important that each of us understands the basic dimension of the entire spectrum, i.e. quality, that too for each of our lives.
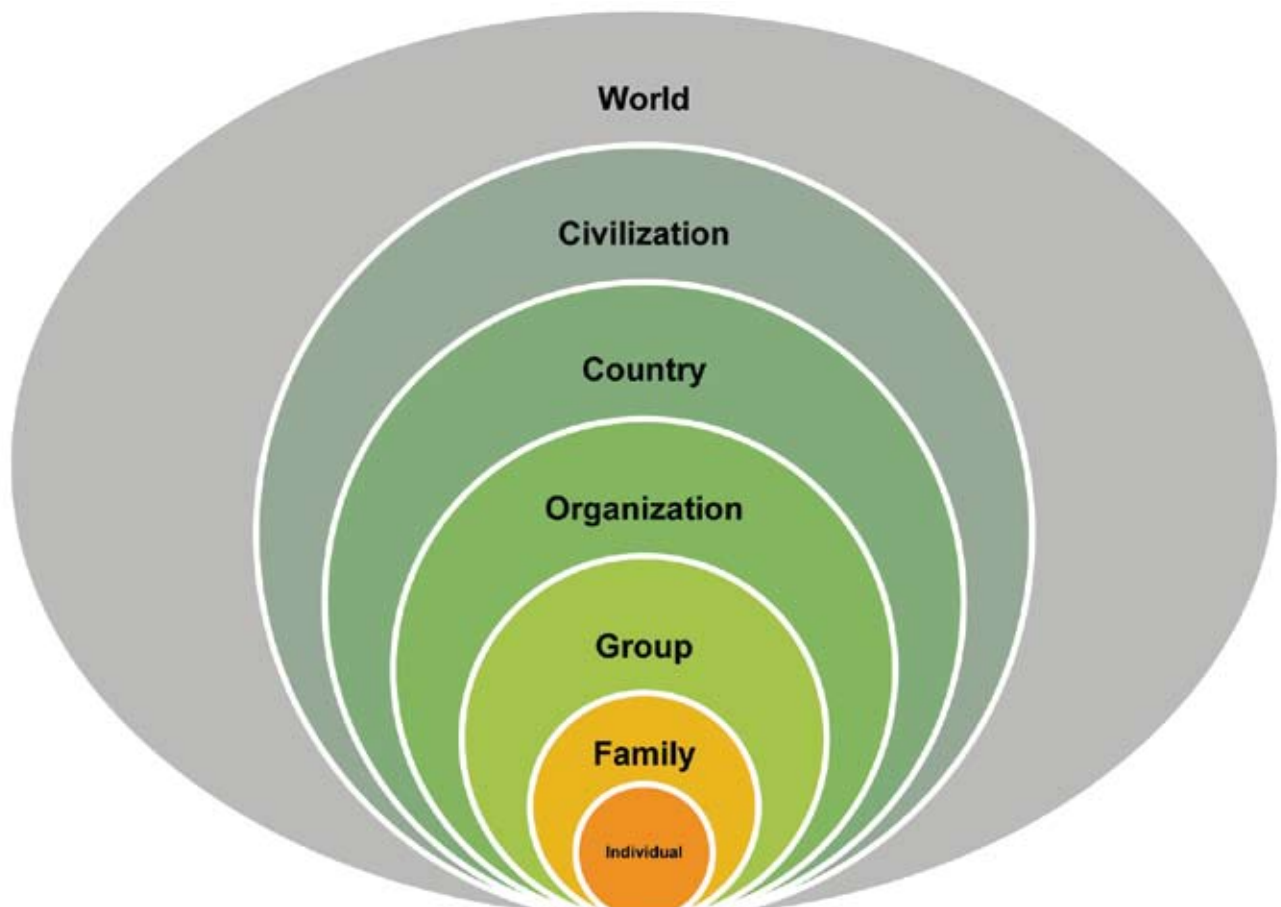
The quality of life increases when we start seeing the following two parameters about us which is actually a driving force to the system:-
1.   Our behaviour towards others
2.   The strategy deployed by us

Quality of Behaviour

Behaviour can be studied from any of the behavioural books developed by psychologists and is also not limited to the human values developed by the previous generations. The important is to understand limitations faced due to the vicious circle which gets developed in behaviour. The vicious circle exists at different level starting from within the entity to across different entities. The vicious circle lies in the aspirations and expectations. Unfulfilled aspirations, as a result of feelings converting into emotions, lead to initiation of story making. Due to inaction as a result of fear and superstition, the incomplete knowledge initiates vicious circle. As the entity understands the story making process, story making activity gets stopped and the life is full of happiness.

When we make personalized interpretations of others' behaviour, which is first error and is a path to ego activation, we risk sinking ourselves into emotions. Emotions disguise ego. Ego is an artificial sense which is developed on other person's opinion about us and it hides our true selves.
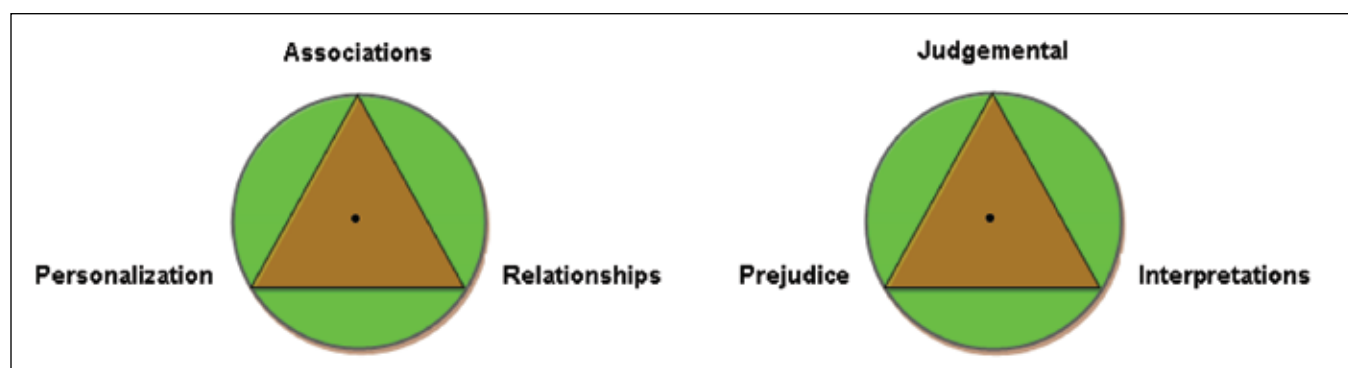
When we are in rightness sense, it leads to anger, control, domination, sadness, anxiety, or even a positive emotion such as happiness. When we operate from this rigid place of 'rightness', we enter into assumption, ideal, or judgment.
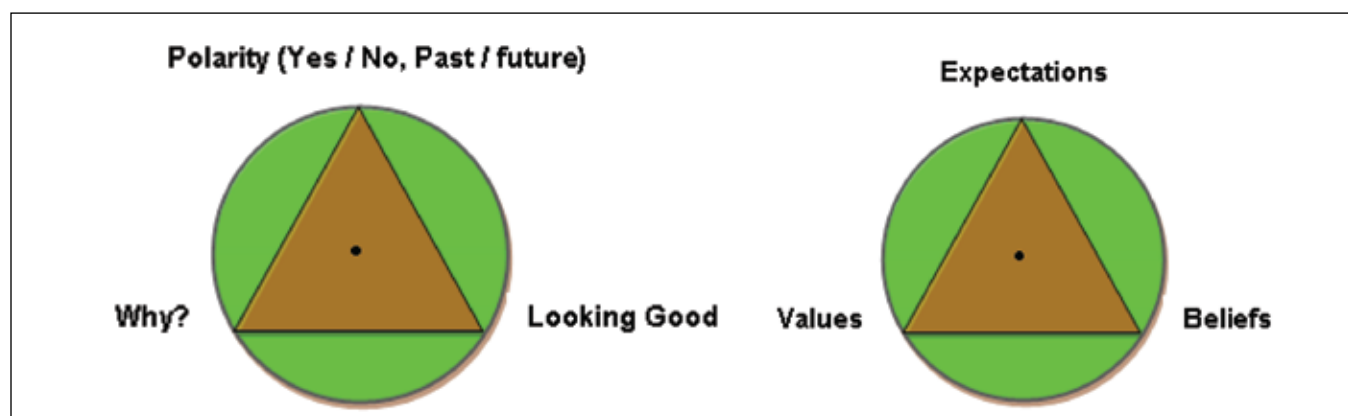
Due to television and other print media, we have been constantly involved in labelling and evaluating resulting in immediately imposing on the individual or the situation, our preconceived ideas of right and wrong, good or bad.

Feelings

Self Talk — Nature Talk

Anxiety in the form of self talk or nature's talk is our way of reacting to our mental judgments. Recognizing when we are anxious is one of the most important things we can do for ourselves in terms of the preservation of our relationships. Worrying is only mental doing and not action, thereby deflects us from initiating action in the present. Actually, it is a mask for fear of being present. Such consciousness leads to broken pain cycle transferred from one generation to other. With continued pain without resisting or reacting, it transforms itself into wisdom. The wisdom will increase in line with our capacity for embracing all of our feelings, whatever their nature. Along with increased wisdom comes a greater capacity for compassion.

Relationship pendulum is important whose extremes are authenticity and containment. For relationships to exist, we should be well within the two extremes of swing of pendulum.

Authenticity — Containment
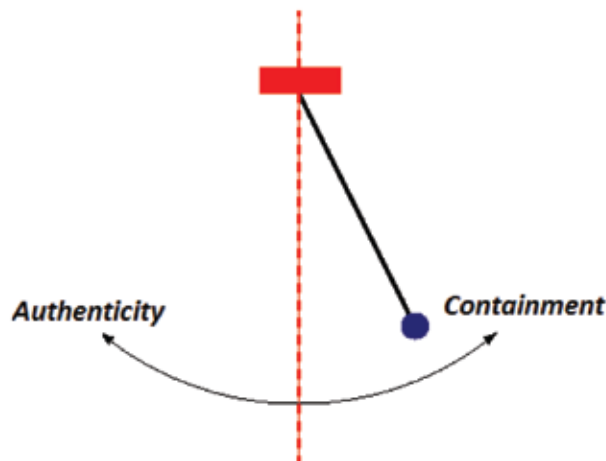
Authenticity – relationship with ourselves i.e. what we think, we say and that we mean it
Containment – relationship with others i.e. what is the will of others

We find ourselves no longer focusing on need, but on service; when we shift from egoic doing to authentic being, leading to a change in our worldview. Parenting is important but society—including our peer groups—plays an equal role in conditioning us. The fact is that our unconsciousness is a function of the unconsciousness of everyone around us. Each of us has inherited themes of unconsciousness from past generations which are not only from our own ancestors, but also from the cultures. Thereby, awareness leading to consciousness is important for bringing about the transformation.

Awareness

■ Un-conciousness
■ Conciousness
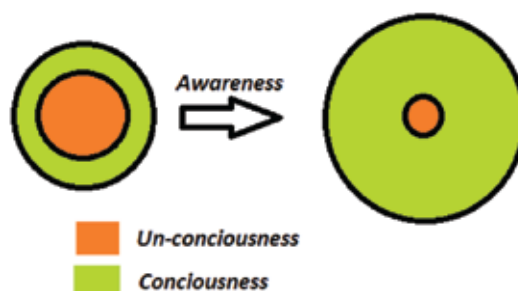
The sweet circle starts when the aspirations reduce to mere happy existence and adaptation to ever-changing world increases. Quality of Life improves as the vicious circle is converted into the sweet circle which can be initiated deliberately through bringing-in consciousness, to give happiness to all.

The role of an entity, who initiates the sweet circle, is worth mentioning. It acts as a friend for the other entities. The Guru can be anyone who is a source of inspiration and has ability to create benchmark in various fields through its guidance. Guru teaches us the value of structure, appropriate containment of our emotions, and such skills as reality testing. God always lives in our minds. The designation of God status to anyone can be given only after that entity leaves so that its whole life becomes benchmark and be a source of inspiration for generations to come.

### Action Points for Improving Quality of Behaviour:-

1. We have to be wise observer of our behaviour. By this, we begin to be aware of our unconscious scripts and emotional imprints leading to an energetic shift and we expand our consciousness. Thus by practicing awareness, acceptance, and tolerance through continued re-inforcement, we learn to regulate our emotions.
2. To live consciously means to focus not on the outcome but the process, not on the perfection of an activity but on our courage to learn from the mistakes. Concentrating on process itself would bring results in long term and mistakes may be considered as windows of learning.
3. Challenge is to measure the behaviour so that it can be improved. For it, generate the language of behaviour similar to other languages. It should be made a part of school curriculum and should be taught at an early age to children.
4. Parenting needs to be taught as a subject at-least at the graduate/post-graduate level of education system.
5. Need to put a control over the hours of television viewing as it is a major source of thought pollution. Instead, success story telling, especially before sleep, provides an interpretive framework for our children's lives.
6. Family may sit together once a week to write down their feeling and emotions. Also, spend some time in practicing stillness and calmness of mind.
7. Encourage writing our daily thoughts and feelings in a journal. It is another way to help make sense of our experiences.
8. We should celebrate key life-events, the memories of which act as a binding force in our life.
9. Nowadays, the greatest challenge to society is the de-grading quality in marketing & sales which encashes our feelings & emotions. Need to develop a code of marketing ethics for carrying out marketing activities.
10. There is need to have a global debate over the Indian ancient system of Gurukuls and the child marriages so that adequate models can be developed for education and relationship.
11. The art of negotiation and the art of losing need to be taught as a model of willingness to engage in a collaborative solution to a situation.

Quality of Strategy

An entity may be in any of its two states – dormant or active. In the dormant or observer state, it accepts the things, situations as it come. In the active state, it starts playing strategy to get the things or situations according to its wishes. Thereby at any level, quality of the strategy being played is important.

1. For an active person, Quality of Life ∞ Quality of Strategy
2. For a dormant person, Quality of Life is high due to level of Stillness in Mind, leading to less of anxiety and emotions.

Transformation i.e. moving from state-A to state-B can be done by any of the active entity. For doing transformation, transformation must take place at a sub-entity level.
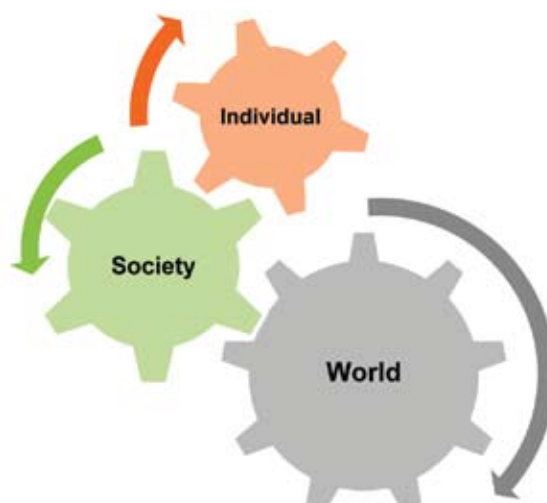
Entity creates a vision which is converted into various small objectives at different levels on a time scale. Objectives are converted into measurable goals. Then comes the strategy. For a learned personality, Strategy is an instrument which shows the action plan for positioning of an entity among a group of entity. It can be called a strategy only when it is able to achieve its objective goals. To be sustainable, strategy needs to be action oriented towards the benefit to the society which can be achieved through discoveries and innovations.
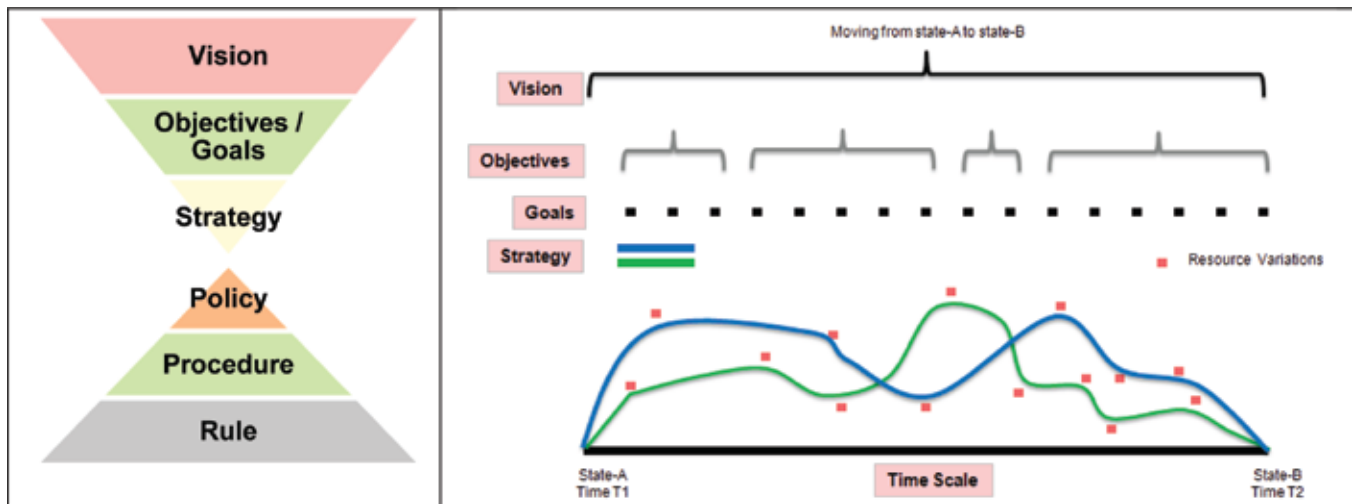
Strategy and policy is bonded together through resources which are man, machine, material, money and media (print). Strategy plays an important role as it tends to bring to a new level of equilibrium through transmission of energy across entities. The entity tends to seek to a zero level i.e. complete sound and perfect, and not to number one level (in its field of operation) as generally which is being sought.

Salient Quality Parameters of the Strategy:-

1. It is the single smallest path to reach the destination which is a vision of the entity.
2. It is system dependent, dynamic in nature and has an inherent driving force.
3. From concept to finishing, its implementation is the time of transformation which would lead to a new level of equilibrium.
4. Driving factor for its implementation is a threat to existence, fear factor, high expectation or a uncomfort level.
5. It is projected for its segment with smallest level related to individual and maximum for the world.
6. It is for the upliftment of the world and should be construed as a need. It should bring happiness to its segment.
7. In general, positioning of entity is taken as the main objective of strategy. Actually, it is not for positioning of an entity at a perceived level but availability of space in environment for it.
8. It does not involve competitiveness or marketing element.
9. Innovation is the core quality parameter of the strategy.
10. Leaders are visionary and acts as implementer. On the other hand, strategy formulators are change agents.
11. It follows the rule of laws in the environment of its operation. If required, the flexible rule may be revised while making the rigid rules intact.
12. Formulated on the basis of the authentic data collection and its analysis.
13. The trust of the strategy implementer over its formulator is a pre-requisite for its success.

Policy acts as a driving force in the environment. It determines the relationship among different entities. Policy creates a structure of the system to work. The working environment is determined by the procedures developed through the creation of rules. The rules are the ground realities for an entity to work in the environment.

Action Points for Improving Quality of Strategy:-

1. Reference point for strategy to be the upliftment of the society. Its implementation process and outcome is safe.
2. The strategy needs to be environment friendly and should create soil, water, air, thought pollution.
3. The strategy should not create disstress to the entity as it is a sole reason for having imbalance in the health system.
4. Relationship, especially the one which is contractual in nature, needs to be improved through timely communication and fulfilling the commitments.
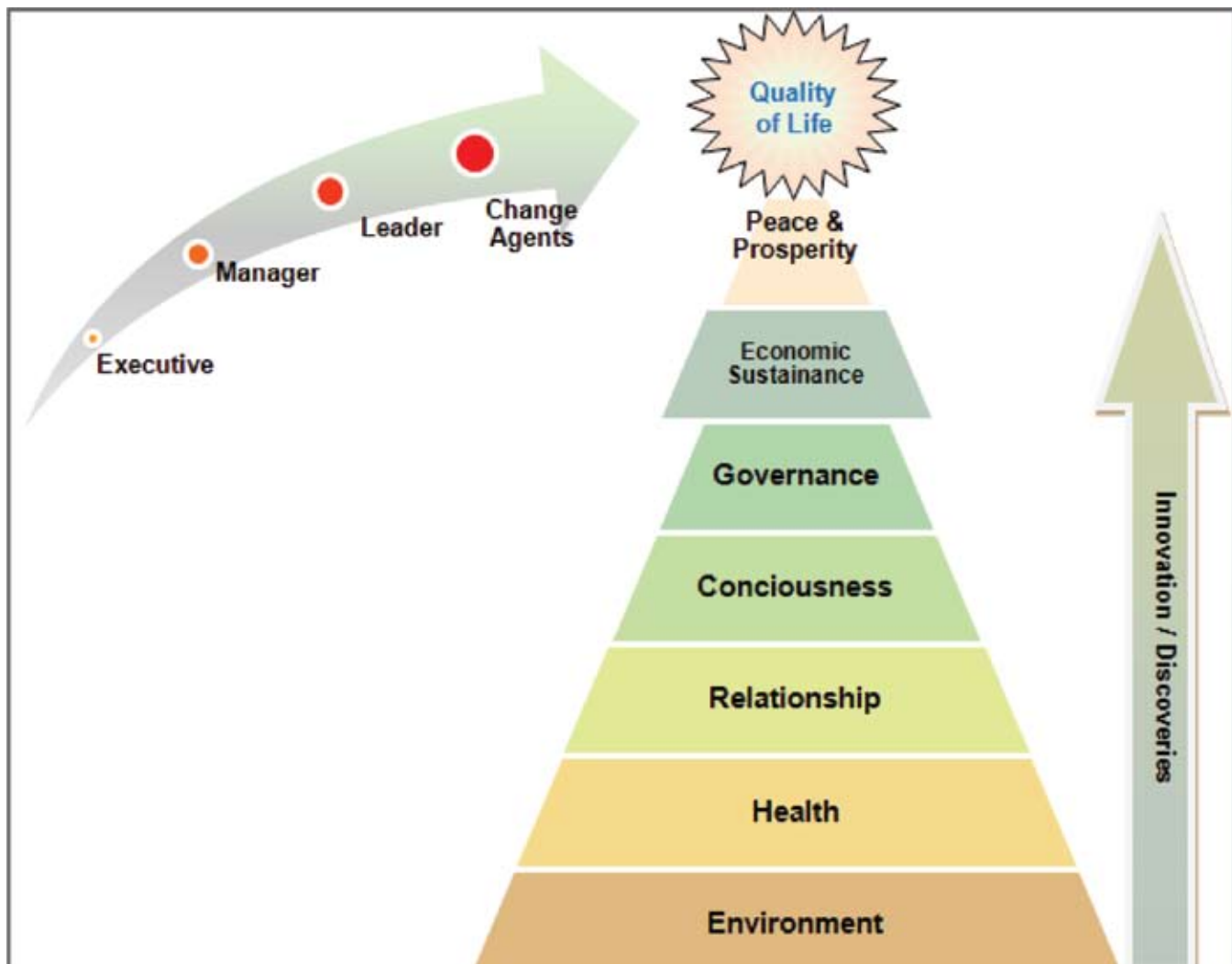
5. Strategy should not be played to overthrow the society-oriented governance system.
6. Strategy implementation may be made dynamic in nature by disclosing the unwarranted strategy of other entities i.e. bringing consciousness.
7. Innovation and discoveries need to be promoted through research work to play a healthy & safe strategy.
8. Strategy should be made by reducing the gap between top and bottom entity for any of the parameters like economic development level, providing same type of basic needs to all, etc.

Thereby, the quality of life for each entity depends upon its behaviour and the strategy being played. We have been reading throughout the life what Mahatma Gandhi once said –

Bura na Bolo
Bura na Suno
Bura na Dekho
Bura na Socho (do not think evil)

Let's enjoy the life with quality through togetherness.

Empowering India through Agriculture Model of Education

As the different plants have different requirements of resources, climatic conditions and nourishment patterns. Similarly, we have to focus on the education based on this model as linear or industrial model of education will be least beneficial for the Indian population. In this article, I have also touched the various core government schemes and the basic challenge which is 'Quality of Education'. Issues such as poorly trained teachers, teacher absenteeism, lack of skills and capacity building in the family and community are the areas to be looked upon to bring the sustainable development.

By | **Mohammad Imran Jaffrey**
(QCI–Associate Member)

"Only the Educated are free," said Epictetus, Greek Philosopher. The word education is derived from the Latin educere 'lead out', from e- (variant of ex-) 'out' + ducere 'to lead'. Education, therefore, is about harnessing and cultivating the mind to bring out more. By means of this brief article, I am attempting to bring out the 'Agriculture Model' rather than industrial model of education in India. Education cannot be just standardised universally by following the process of developed nations but must have to be customised as per the background and foundation of the majority of the Indian population which is rural based. I would like to discuss upon 'Quality of Education' as the core challenge of various missions of the government policies and the social interventions of NGOs retarding the growth of desired outputs of literacy missions in India. "To educate is not just a systematised attempt to fill a child's head with useful Information…The more significant part of the process of education lies in the ability to draw out of every child his or her capacity to explore, to understand and to play around with words, objects, concepts and ideas." [1]

Primary education in India and policies

Education and literacy is a vast subject to discuss with manifolds issues and aspects in India. The system is categorised into broadly three basic levels–Elementary education, Secondary education and Higher education. Focussing on the foundation level that is primary education, since independence till date, there has been significant efforts and focus given by the government on elementary level of education which is the foundation of the literacy. Robust initiatives were taken by the governments and the policy makers to uplift the society from the curse of illiteracy in India. Through National policy on education, by strengthening the fundamental rights of the constitution in Article 21 discussing education as the fundamental rights, several amendments were made on the Right to Education Act (RTE) and lot of initiatives have also been taken up towards provision of Free and Compulsory Education (FCE). For instance, 'Mid-day meal scheme', 1995 have expanded to large scale across the country specially in Northern states, Sarva Siksha Abhiyan (SSA), 2011 targeted to form 200000 schools in India. [2] Another initiative was amendment of RTE Act, 2009 which made compulsory to the private schools to reserve the 25 per cent of admission for low-income, marginalised sector and disabled students.

Quality of education has lesser emphasis

"India is a country obsessed with education…Education is a two-sided platform where great faculty meets great students. In India, the quality of students is good. But the deterioration in the quality of faculty across tiers is greater than the decline in the quality of students." - Nitin Nohria, Harvard Business School's tenth dean. [3]

Despite the progress in education and growth in literacy rate from 18.33 per cent in 1951 to 74.04 per cent in 2011 in India [4], there remains lot of challenges and areas uncovered. What have we actually drawn out from such growth of literacy is not just a point of debate but matter of assessment and evaluation. Still unemployment is an element of elections campaigns in India, Still we are fighting for gender equiality and still we need the slogan *'Beti Bachao, Beti Padhao'* (save girl child, educate girl child) in today's 21st century era .This indicates poor result of these prolonged efforts and the lack of quality education.

Stumbling block to reach the outputs

Lack of skilled/Trained teachers: In a recent news channel coverage in 2013, it was found that in one state tests were conducted for 44000 teachers and not much to the surprise, more than 10,000 teachers failed. These teachers were deputed for 10th class but lacked the knowledge of even 5th grade academics. [5] Sarva Skihsha Abhiyan has opened millions of schools across India but didn't cater to the quality teaching and skilled teachers.

Teacher Absenteeism: India has the highest absenteeism in the world at 25 per cent, according to UNESCO's international institute of education planning study on corruption. Developing countries often spend between 80 per cent-90 per cent of their education budgets on teachers, without getting the most basic of returns–getting teachers to show up for work. [6] For instance, India's Budget 2006-07 allocated ₹155 crore for teachers' training, while the budgetary allocation for primary education was increased by ₹4,000 crore, to ₹15,367 crore.

Rural Urban Gap: The resources and environment of education system has a huge gap between the rural and urban cities in India. It requires no research to acknowledge the fact that whenever we talk of best schools, best coaching, best colleges or in other words so-called top 20 or top 10, its always the metro cities and urban cities in India and then the layer is totally cut off creating a long gap. Empowerment of all the states and cities has to be done rather than concentrating the resources to few cities. Making just 'Delhi a world class city' anyway, is a separate issue of the discussion.

English Medium Language barrier: As after certain level of schooling, the medium of education shifts to English language to meet the competitive environment. Since English communication in rural and semi urban cities is not strong, this creates a problem at later stage and leads to concept miss outs. Again the Training of the teachers in English communication needs special attention.

Gender Gap: Still majority of the community, villages in rural and semi urban cities in India are reluctant to send the girls and boys in the same class. Marriage of a girl is still more important than her education. Also, constraint of monetary resources dominates the option of collecting dowry for the girls over investing in her education.

Weak monitoring and evaluation check: Lack of proper checks and balances and transparent mechanisms of monitoring and evaluation process in education is one of the important factors for the failure of the policies and objectives. Budgetary funds are either underutilised or miss utilised, it has to be monitored and keenly analysed.

Agriculture Model of Education

Let's recollect the meaning of education again that' is 'to lead out' which ultimately means to empower and equip the mind rather than informing the mind. There is no point of the pattern of education where a child can name a horse in seven different languages but brought a Buffalo for a ride. Let's invest the budget and policies on developing the agriculture model of education in India. Just like the quality of the plant depends upon the quality of the soil, proper sunlight, gaps between the other plants and importantly right quantity of water and fertiliser supplies. Education has to be properly cultivated rather than just produced in bulk. This model can be divided into four categories elaborated below:-

1.Root level 2. Ground Level 3. Micro Environment Support 4. Macro Environment

ROOT LEVEL

- **Train the mother rather than teacher:** Mother is the first teacher of child and If we focus on female inclusivity in literacy and education missions in India, it would be far more productive and result oriented. This will be done by awareness of education, techniques to empower the mother to cater the child's basic learnings.
- **Invest on capacity building than Environment development:** Skills based training to the mother and family members with involvement of local community could be beneficial in creating a environment of learning from micro to macro level.
- **Increase the community participation:** Teachers need to communicate with the local people, understand the environment and culture. Through advocacy program and campaigns on literacy and further involving the local panchayat, community organisations, etc can help in creating a accountable system of programs and funding in education in rural areas. Many social sectors and NGOs have already started but they still lack funding and motivated volunteers at times.

GROUND LEVEL

- **Involve volunteer rather than deputing teachers:** Planners and policy makers on education can try the process where they must have certain percentage of volunteers in the teaching or training department. These volunteers must be from within the community chosen based on their skills and capacity. This mix of deputed teachers and volunteers can manage the challenges of absenteeism, misuse of funds and quality in teaching methodology.
- **Pattern of education:** The teaching pattern has to be concept-oriented based on practical learnings and interactive method to arouse interest amongst the children. This requires curriculum designing, techniques of teaching, training the teachers and volunteers. Few basic approaches in this direction can be worked upon as per the below pattern of education.
- **Activity-based concepts of pre schools:** This will arouse interest and stimulate desire to learn more.
- **Case study Approach:** This will build the concept
- **Situation reaction method:** This model will help the response and decisions ability
- **Interactive rather than subjective method of teaching:** Involve participation than just audience
- **Connect with their local environment and culture:** This will enable quick learning process.

MICRO ENVIRONMENT SUPPORT LEVEL

- **Revival of current policies and planning on education:** Mid-day Meal schemes was not that successful and it was found that the teachers and the students were more interested in the meal than the education. Filled belly but empty mind. Similarly, with the recent Right to Education Act (RTE) Act, 2009 making mandates for the schools to have 25per cent reservation for the marginalised class

is not a feasible idea. As those 25 per cent of students won't be able to cope with the environment of rest of the students, the teaching process won't be equally productive to both the category of the students and again these reserved sections will need special classes and customised teaching methods. Though we came up with noble intentions but we have to really give a check on the reasons of failures and have to revive the strategies to achieve the desired results

- **Quality of teachers:** Just salary deduction is the driving point to control absenteeism of teachers but environment and teacher's engagement program needs to be re-designed and evaluated. Poor skills and lack of training of the teachers is another reason contributing towards the poor growth of education in India. These have to be addressed by skill development plans, motivation schemes to retain the quality resources.

- **Effective monitoring and evaluation process:** Large amount of finance has been pumped into this sector but we have poor monitoring and evaluation schemes to test the utilisation of the budgets. Accountability and transparency into the program implementation process has to be established with check point at every critical stage.

- **Roles of NGOs and Social intervention:** Organisations such as 'Azim Premji Foundation', 'Teach India Campaign' have been doing a very dedicated work in the area of education and support and response of the target audience, the people and community are important factors to reach the goal.

- **Connecting with the online /virtual learning process:** Why mobile has entered the rural areas faster than primary healthcare and medical services? This is the model where we have to research and work upon to adopt the similar process of penetrating the rural cities in India and promote education. We have to further use the tools of IT, Online and virtual markets to make quality education accessible and affordable by all.

- **Infrastructure:** Healthy classrooms, clean and hygienic sanitations, text books and basic amenities are the important material components which will help in nourishing the child and motivating the teachers.

MACRO ENVIRONMENT LEVEL

This is the overall condition that exists in Indian economy as a whole that will impact in the micro level efforts towards the education and other sectors of the livelihood. In general, the macro environment will include trends in gross domestic product (GDP), inflation, employment, spending, and monetary and fiscal policy. May be 'Make in India' slogan will impact in strengthening the macro environment factors of India which would further increase in improving the job conditions of the teachers, enhancing their motivation to serve at rural areas and contribute in good infrastructure for the schools.

CONCLUSION

We have to understand the basic difference between literacy and education and need holistic approach to empower

the citizens of India through quality education. The increasing gap between the rich and the poor can only be bridged through strong foundation of education system in India. The process has to be customised depending upon the capacity, the culture, society and their environment and thus agriculture model of education is the way to achieve the best outputs. Huge population, large varieties of culture, differences in social orientations and language barriers are the various challenges in devising the mechanism on agro-based model at micro level. Pilot projects and then large-scale pooling of resources can be the way to start approaching this direction. In this article, I have shared the raw thoughts and just a rough idea and this might be having a large scope of improvement and I envisage gaining more clarity on the issue of education in India.

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'Swachh Survekshan-2016' : Taking forward the 'Swachh Bharat Mission'

The 'Swachh Survekshan' was launched in January 2016 to assess the sanitation and solid waste management status in 73 major cities in India (comprising 40 per cent of India's total urban population) including 53 cities with a population of above 10 lakhs each, and state capitals. This was the first survey since the launch of Swachh Bharat Mission in October 2014, and Quality Council of India carried out this survey. 'Swachh Bharat Mission' was launched by Hon'ble Prime Minister Shri Narendra Modi on October 2, 2014. The 'Mission' laid a roadmap for improving the level of sanitation and cleanliness in the country with a vision to create a Clean India by 2019.

Swachh Bharat Mision is one of the pioneering initiatives of the Government led by Prime Minister Shri Narendra Modi to enable Clean India by the year 2019, commemorating the 150th Birth Anniversary of Mahatma Gandhi. This is intended to be a true tribute to the great leader and visionary who raised his serious concern about sanitation in the country in a very telling manner in Varanasi, exactly 100 years ago.

Swachh Bharat Mission aims at ensuring door-to-door garbage collection and proper disposal of municipal solid waste in all urban areas by 2019. The mission seeks the active participation of various stakeholders including the private sector and the citizens for Swachh Bharat to become a mass movement. The Union Ministry of Urban Development is responsible for achieving the objectives of Swachh Bharat Mission in urban cities and towns.

Objectives of the mission include:

- Elimination of open defecation
- Eradication of manual scavenging
- Modern and scientific Municipal solid waste management
- To effect behavioral change regarding healthy sanitation practices
- Generate awareness about sanitation and its linkage with public health
- Capacity Augmentation for Urban Local Bodies (ULB)
- To create an enabling environment for private sector participation in Capex (capital expenditure) and Opex (operation and maintenance)

As a prelude to encouraging cities to improve the level of cleanliness, sanitation and hygiene, the Ministry of Urban Development (MoUD) commissioned an extensive survey across 73 cities, including 53 cities with population of more than one million and state capitals. The survey, the first for Swachh Bharat Mission,
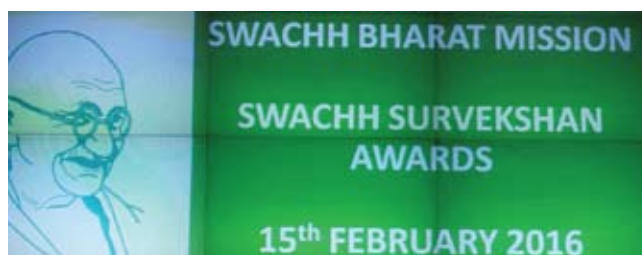
was conducted by Quality Council of India and has been aptly named as 'Swachh Survekshan'. The methodology, process and outcome indicators of the survey were designed by MoUD.

Swachh Survekshan was conducted from January 5-20, 2016. Cities were given two months' preparatory time from October 2015 to support the data collection activities carried out during the field visits. Quality Council of India, a professional agency of the Government of India, conducted the survey. They have deployed 25 teams with three surveyors each across the country after imparting necessary training. Every team was required to visit 42 locations across each city covering major zones like railway stations, bus stands, market locations, planned residential areas, informal and unplanned localities like slums, religious places, toilet complexes, etc.

About three crore people have been reached out by the Quality Council of India informing about the proposed survey and seeking their feedback by way of their response to a set of six questions such as if they find the city clean, availability of dustbins, access to toilets, functionality of public and community toilets and if the respondent has a toilet at home.

To train the assessors for a first-of-its-kind Survey, MoUD experts, ULB officials and the project team conducted trainings across four cities. Steps were taken to ensure that the surveyors were equipped with adequate IT tools (tabs, Apps and web tools) to minimize physical intervention and reduce chances of errors. A central control room was set up to assist the assessors and solve any queries they faced during the survey. The control room also reviewed the data submitted by the assessors in detail on a real-time basis to ensure the objectivity of the survey and to avoid any ambiguity in the process.

Based on the findings of the Survekshan, this report ranks the cities on various parameters in the area of cleanliness, hygiene and sanitation. The Survekshan was divided into three parts: Service level status, Independent Observation and Citizen Feedback. The cities have been ranked individually on their performance on above parts as well as their overall performance.

The performance of each ULB has also been benchmarked across six areas of evaluation:

- Strategy for Open Defecation Free town (ODF) and Integrated Solid Waste Management (SWM)
- nformation, Education and Behavior Change Communication (IEBC) activity
- Door-to-door collection, sweeping, collection and transportation
- Processing and disposal of solid waste
- Public and Community toilet provision
- Individual toilets

The assessment reveals that the cities are at very different levels in terms of progress made under Swachh Bharat Mission. Some municipalities such as Mysuru, Chandigarh and Tiruchirappalli are leaders in the area of sanitation, health and hygiene. The survey offers a comprehensive assessment of the level of cleanliness, and the respective Municipal Corporation's level of preparedness in urban India and would help the government to mentor and guide cities on the basis of needs and gaps. It will help the ULB in assessing their performance vis-a-vis other ULBs and identify areas of improvement. The findings will also enable the ULBs to learn about best practices being implemented in other cities and to adopt them, tailored to their own requirements. The survey aims to foster a spirit of competition among the cities in urban areas.

In the long run, an effective reform involves a sustained and knowledge-based process that requires benchmarking, consultation, sharing of information and most importantly monitoring and evaluation. This report is inspired by the notion that, 'What gets measured, gets done' and 'Competition makes us strive to be better' and therefore, it is intended to trigger a multi-stakeholder, participatory and reform-driven process.

Shri Narendra Modi, Prime Minister
"There cannot be a bigger contributor than Mahatama Gandhi towards Swachh Bharat Mission. In the journey of one and a half years since the launch of the Mission, I would like to acknowledge the participation and involvement of citizens of the country especially children, and also the positive and proactive role played by the media, in the Mission's journey till date."

Shri M Venkaiah Naidu, Minister of Urban Development Housing & Urban Poverty Alleviation and Parliamentary Affairs
As a mark of respect to the Father of the nation, our government has taken an ambitious pledge to make India Open Defecation Free and clean by 2nd October, 2019 through the Swachh Bharat Mission. In its second year since launch, it is heartening to note that the Swachh Bharat Mission has caught the imagination of citizens. The increased participation from citizens, be it as part of our thematic drives, or voluntary 'swachhata' activities from inspired individuals and organizations, is slowly but surely pushing the Mission towards becoming a 'Jan Andolan'. I appeal to all states to institute similar ranking exercises annually for all their cities and towns, and all cities and towns to institute annual ranking exercises for all their wards.

**Adil Zainulbhai
Chairman, Quality
Council of India**

I am thankful to the Ministry of Urban Development (MoUD) for giving us the opportunity to be a part of such a unique exercise, and entrusting us with the responsibility of conducting this survey on their behalf. It is a matter of pride for our entire team to have been a part of this survey, and I hope that we have been able to do justice to the confidence entrusted in us by the MoUD. I would also like to thank our partners Quality Austria Central Asia, RepIndia and netCORE, all participating municipalities, and the citizens who actively provided their inputs, for their unwavering support and encouragement in conducting this mammoth exercise, and making it a success. We look forward to more such opportunities in future to be an active partner in India's journey towards "swachhata".

The ranking of the cities was based on data-collection from three sources, on the basis of which the survey has been segregated into three main areas:

1. Service Level Status Data (1,000 marks):

Preliminary data was collected in advance by a process of self-assessment from municipals as per the questionnaire. Assessors visited 73 municipalities to review the documentation and collected the data systematically ensuring that the process is independent and unbiased.

2. Independent Observation Data (500 marks):

The collection of data for this part was based on physical observation by assessors. A questionnaire was designed to facilitate data collection. The survey assessors used maps and simple handheld recording formats to record their observations and findings along with photographs. Assessors systematically collected photos as evidence for field observations ensuring that the location, date and time are tagged on all the pictures. As part of direct observation, the whole municipal jurisdiction was divided into four zones. Assessors visited the following places in each zone in each city:

Slum areas:

Informal settlements and urban villages across the different parts of the city.

Neighbourhoods (non-slum locations) including:
* Planned colony under municipal jurisdiction
* Unplanned colony

Commercial/Main public locations:

* Main market area

* Religious Places

Bulk waste generator:

* Hotels, banquet halls, weekly vegetable market areas (one of them)
* Community Toilets (2 community toilet complexes in each zone)
* Public Toilets (2 public toilet complexes in each zone)

Additionally, assessors also visited the following places under each municipality:

* Main Bus Station
* Main Railway Station

3. Citizen Feedback Data (500 marks)

Minimum sample size of 1000 surveys or 0.10/0 of city population (whichever is less) was considered for City ranking in 2016. Feedback from Citizens was obtained using IVR surveys wherein 6 questions related to cleanliness, hygiene and sanitation were asked to the citizens. The assessment reveals that the 73 cities are at very different levels of cleanliness, hygiene and sanitation.

Results of 'Swachh Survekshan-2016' were analyzed to identify the top leaders, aspiring leaders, cities where accelerated efforts need to be made and the slow movers. This is meant to help the cities know where they stand in absolute terms and in relation to others besides what more needs to be done by each city to ensure sanitation. In that sense, Swachh Survekshan-2016 is more holistic, participatory, purposeful and meaningful for future guidance and evolving course of action.

The top 10 clean cities in the country in the order of merit are:

1. Mysore-Karnataka.
2. Chandigarh
3. Tiruchirapalli-Tamil Nadu
4. New Delhi Municipal Council-National Capital Territory of Delhi
5. Visakhapatnam-Andhra Pradesh
6. Surat-Gujarat
7. Rajkot-Gujarat
8. Gangtok-Sikkim
9. Pimpri-Chindwad-Maharashtra and
10. Greater Mumbai-Maharashtra

Of the 2014 rankings of these 73 cities, Faridabad ranked at the bottom scoring only 9.40 per cent marks. This city in this year's survey scored 51 per cent reflecting the improvement made. This applied to all the 73 cities in different degrees capturing the impact of Swachh Bharat Mission.

Under Swachh Suvekshan-2016, taking as core of 70 per cent as benchmark, 15 'Leaders' have been identified. These include the top 10 rankers announced earlier besides Pune, Navi Mumbai, Vadodara, Ahmedabad and Imphal.

There are 20 Aspiring Leaders trying to catch up with leaders. These cities have scored between 60 per cent and 70 per cent. Leading this group is Panaji with a score of 69 per cent and includes Thane, Coimbattore, Hyderabad, Bhopal, Allahabad, Vijayawada, Bhubaneswar, Madurai, Lucknow, Jaipur, Warangal, Agartala and Vasai Virar whlch is ranked 35 with a score of 60.75 per cent. There are18 cities which could do better with accelerated efforts with scores in the range of 50 per cent to 60 per cent. Chennai leads this group with a rank of 36 and a score of 59.70 per cent. Others in this category include Gurgaon, Bengaluru, Delhi Municipal Corporation, Thiruvananthapuram, North Delhi Municipal Corporation, Kanpur, Agra, Faridabad, East Delhi Municipal Corporation and Shillong ranked 53 with a score of just above 50 per cent.

There are 20 'slow movers' who need to really work hard and focused to further improve sanitation with scores of below 50 per cent. This group includes -Hubbali-Oharwaci in Karnataka ranked 54th with a score of 49.60 per cent, Ranchi, Jodhpur, Cuttack, Kalyan Dombivili, Varanasi, Ghaziabad, Patna, Asansol and Dhanbad ranked 73 with a score of 23.20 per cent. In terms of components of Swachh Bharat Mission, solid waste management related parameters have been assigned 60 per cent of the total marks, 30 per cent to construction of toilets and 5 per cent each for sanitation strategy and behavior change communication.

Over one lakh citizens have responded with a minimum of 1,000 citizens per city or 0.1 per cent of city's population, which is considered as statistically significant for such surveys. So, by virtue of physical validation of records of urban local bodies and photographic evidence of independent observation and involvement of citizens, Swachh Survekshan-2016 is totally participatory and evidence based. This is a significant improvement over the last survey conducted in 2014.

This kind of categorization with benchmark scores for each group helps cities know where they stand in absolute terms and also in relation to other cities. They can accordingly make their strategies for improving sanitation on ground

Another revelation of Swachh Survekshan-2016 is that there are 10 cities which have made significant improvement over the

Swachh Sarvekshan

situation in 2014 and we called them 'Top 10 movers'. This group is led by Allahabad which has improved by 45 ranks since 2014 to beat 22 in this year's survey. The others are: Nagpur (which has improved by 40 ranks), Visakhapatnam (39 ranks), Gwalior (34 ranks), Bhubaneswar (32 ranks), Hyderabad (31 ranks), Gurgaon (29 ranks), Rajkot (25 ranks), Vijayawada (23 ranks) and Lucknow (23 ranks).

These top 10 movers include four cities from North and one from the East, accounting for 50 per cent which goes to suggest that focused efforts are being made in these regions to improve sanitation.

On the other hand, there are 10 cities that have slipped the most in terms of ranks despite doing better on ground. In this group of Top10, Bottom movers are - Jamshedpur, Kochi, Shillong, Chennai, Guwahati, Asansol, Bengaluru, Ranchi, Kalyan Dombivili and Nashik.

In this Bottom movers group, there is not even a single city from the North which is revealing and significant. On the other hand, there are three cities form the south and two from the west which are generally considered to be good performers, this only goes to suggest that the domination of South and West in terms of ranks is under challenge.

In all, of the 73 cities surveyed this year, 32 cities have improved their ranks over the ranks of 2014. These include; 17 from the North, 6 from the West, 5 from the South and 2 each from East and North East. What emerges from these results and the attendant analysis is that there is a lot of churning going on among the cities and new Shakers and Movers are emerging with determination to do well on sanitation on ground and also in relation to other cities. This is a good sign.

The conclusions that emerge from Swachh Survekshan-2016 are:

1. The survey was thorough, professional, evidence-based and participatory;
2. Swachh Bharat Mission has made a definite impact in terms of enhanced efforts to improve sanitation, reorientation of attitudes of urban local bodies and citizens and improvement on ground;
3. Cities are at different levels in terms of progress towards sanitation and there is a churning going on to do better in real terms and in relation to other cities with new Movers and Shakers emerging;

4. Cities from the South and the West continue to do well but those in other parts of the country and particularly in the North, are beginning to catch up with the leaders;
5. There is a felt need for significantly stepping up sanitation efforts by the slow movers In the East and some parts of the North;
6. Categorization of cities as Leaders, Aspiring Leaders, those who need to accelerate a bit and Slow Movers would help them plan future course of action and for the Government of India to assist with necessary monitoring, mentoring and handholding as required;
7. Making the survey results would further foster a healthy spirit of competition among cities as everything that gets measures, gets done and competition makes us strive better; and finally
8. A definite and positive beginning has been made towards realizing 'Swachh Bharat'.

Each participation counts! Take the **Swachhta Pledge.**
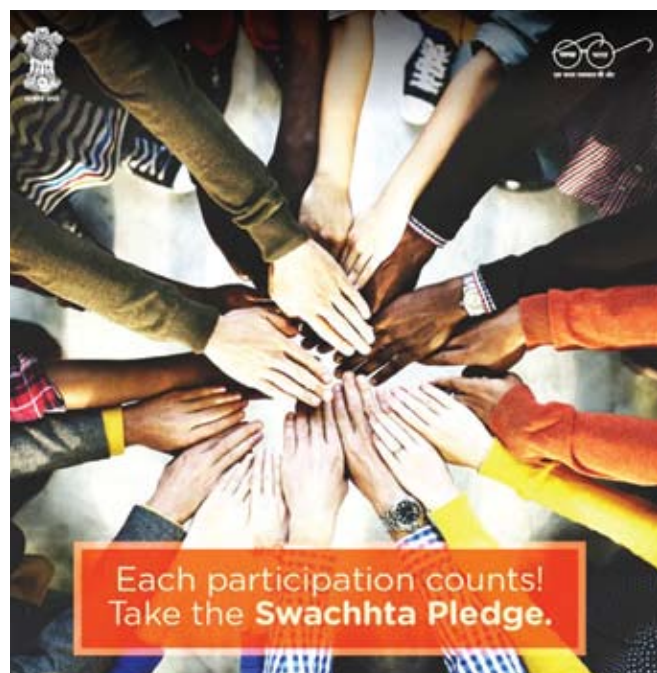
NBQP Celebrates World Quality Month – November 2015

By | **Priyanka Maithani**
Assistant Director, NBQP, Quality Council of India

NBQP/QCI celebrated the Quality Month 2015 in the month of November-December with an objective to recognize the importance of an overall quality focus and to arouse the interest of the masses to incorporate proven quality principles into daily life. The same was facilitated by organizing multiple online competitions, viz. Poster Making, Slogan Writing, Quality Quiz, Kaizen Implementation.

The events were themed around: "Quality Through Teamwork". This maiden attempt of NBQP to explore the quality-themed outlook of the people was open for all and spanned for nearly 1 month starting from November 16-December 22, 2015. Some of these competitions received a profuse response from all across India. The winning entries will be felicitated with gift hampers in the upcoming sustainability workshop by NBQP-QCI in New Delhi.

NBQP also organized an evening seminar at India Habitat Centre on Dec 4, 2015 on the topic 'Kaizen-Experiences in Implementation at Government Department'. The seminar saw engaging discussions on the key theme of how simple innovative Kaizen practices can be used as a framework for improved efficiency, productivity and operational excellence. Several key officials from various ministries participated in the seminar.

The seminar commenced with a welcome address by Mr. C. K. Biswas (CEO, NBQP). Mr Biswas apprised that the seminar was first of its kind with the main objective to showcase the best practices and to share the success stories of the implementation done recently at the PMO, using the Kaizen concept and 5S tools which led to faster delivery, quality product and increased speed and efficiency of the work process.

The Seminar witnessed representation from over 120 officials from various government departments/ministries. Overall, it was a fruitful session and definitely provided impetus in nurturing the Kaizen culture among the audience.

OPINION OF THE KEY DELEGATES

R Mukundan
Chairman, National Board for Quality Promotion
President, Bombay Chamber of Commerce and Industry
MD, Tata Chemicals Limited

Mr. Mukundan delivered the opening remarks with a brief introduction to NBQP and its operational methodology. He mentioned that NBQP is not only working in private sector but also in ministries/departments. He also made the audience aware about the various activities carried out by NBQP which includes:

- The National Quality Conclave, which is a flagship event of Quality Council of India.
- QCI-D.L Shah Quality Award which recognizes successful projects that have outperformed in the field of quality.
- Ongoing project on public grievance system, DARPG for systemic reforms.
- Recently created a website to host the various online competitions to commemorate Quality Month in order to encourage the QCI Associates to focus on quality improvement.

He stated that the seminar was basically to showcase the work done in the ministries, specially the PMO, and would hopefully get additional support on how to cascade the Quality Improvements in terms of what services citizens need every day and benefits in terms of efficiency, lesser manpower and lesser stress on employees owing to that work. Mr. Mukundan deliberated that "Improving Quality is a constant journey and our attempt is to motivate all the ministries to participate in the similar mode of working."

Adil Zainulbhai
Chairman, Quality Council of India

Mr Zainulbhai was the second speaker. He quoted that "The Best improvement in quality comes because people feel the Voluntary need to do that and not from the govt. mandate". Supporting the same, he said that standards are made to protect the people, but those are the minimal standards and not the maximum ones which are always based on the level of quality that consumer wants. He gave an insight on the good examples within the government where a very high-level of quality has been achieved, thus improving the lives of the citizens. He spoke about the 2nd and 3rd tier suppliers pertaining to different MSMEs who need a lot of help to improve upon the quality of their services. He also emphasized that 'Make in India', which is a great step to rejuvenate the economy, cannot work unless we work on Quality. Talking about measuring of the quality, he said that Digital India is an interesting way to deliver all kinds of services and to measure the quality. Adding to this, he deliberated that if we can't measure the quality, then we cannot improve it.

G R Raghavender
Joint Secretary, DIPP

Mr Raghvendra addressed the session on behalf of Mr. Amitabh Kant (Secretary, DIPP). He spoke about the breakthrough which Kaizen implementation will bring after horizontal deployment in the government departments.

Jayanth Murthy Founding Director, Kaizen Institute

The main presentation was delivered by Mr. Murthy who shared how organizations can adopt a transformative and ambitious approach for continual improvement through Kaizen.He introduced new terms such as GEMBA, which means real place where value is created through Kaizen implementation. He cited the example of how Kaizen implementation at PMO has significantly shortened the processing time of the thousands of letters (in the form of couriers, mails, postcards) that were written to PMO each month. The same was achieved by devising a methodology where all the value added people involved in the dak processing were organized at the same place in a sequence for co-operation. He added that there is a possibility of unlimited potential of improvement only if we go to the real place, i.e, GEMBA to observe the problem and their conditions. Further he introduced three new Japanese words used in KAIZEN terminology namely MUDA (waste or obstruction to flow), MURA (defects and variations) and MURI(any activity asking unreasonable stress). Lastly, Mr Murthy highlighted how Kaizen can be implemented using the 3P Model which involves engaging the people from the GEMBA, physical improvement in the workplace and overall workplace improvement. At the end of the presentation Mr. Murthy responded to the specific queries raised by the participants.

Dr R P Singh Secretary General, QCI

The seminar was concluded with a vote of thanks by Dr R P Singh, Secretary General, QCI, followed by a cocktail dinner. The feedback received from the audience was very encouraging and overwhelming. The event was well received and appreciated by all.

Winning Entries of Quality Month Competition, November-2015

POSTER MAKING (BEST 4)

Pragati Sharma,
Student, Lissa Institute of Design

R. N. Raturi,
Officer, Tata Motors Ltd.

Abhishek Sharma,
Student, ICAI

Kamal Chaudhary,
Director, Suparshva Pvt ITI

SLOGAN WRITING (BEST 6)

- Manoj Agarwal,
  Director, Margdarshan Management & Measurement Pvt Ltd

- Divya Singhal,
  Associate Professor, Goa Institute of Management

- Keshav Ram Singhal,
  Consultant and Trainer

- R N Raturi,
  Officer, Tata Motors Ltd.

- Meenakshi,
  Consultant-Quality & accreditation Sooriya Hospital

- Moti Sagar,
  Line Assistant, Honda Car India Ltd.

BEST 4 SLOGANS

- Quality Sustained, Customer Retained
- Quality comes when demonstrated, not dictated
- गुणवत्ता पर देकर बल सुधारो आजसुधारो कल
- गुणवत्ता प्रबंधन आज के उपभोक्ता की दरकार इसी के बल पर होता सुखी जीवन साकार''

QUALITY QUIZ (BEST 3)

- Amrit Karmarkar,
  Director, InClinition

- Dr. Geeta,
  Quality Manager, Sankara Eye Hospital

- Jitendra Sharma,
  Manager, Quality Assurance, Wipro Enterprises (P) Ltd.

KAIZEN IMPLEMENTATION (BEST ENTRY)

- R N Raturi,
  Officer, Tata Motors Ltd.

NPC goes for ISO 9001:2015 with support from NBQP, QCI

By | Avik Mitra
Senior Advisor, NBQP, QCI

With over 1.1 million certificates issued worldwide, the ISO 9001 provides several benefits to an organization if it approaches ISO 9001 implementation in a practical way. These include more efficient work practices, focus on business objectives, improving the level of customer satisfaction, reducing the cost of operation and building right first time attitude across the organization. The ISO standards are reviewed every five years and revised if needed in order to ensure they remain useful and relevant to business. The new version of the standard ISO 9001:2015 has been announced in September, 2015 replacing the previous version ISO 9001:2008.

The National Productivity Council (NPC), an autonomous body of Department of Industrial Policy and Promotion (DIPP) which is involved in activities promoting the cause of productivity in all sectors of the Indian economy, has now decided to implement ISO 9001:2015 at its Headquarters located at New Delhi. The NPC has requested for technical services from the National Board for Quality Promotion (NBQP), Quality Council of India, for implementing the requirements of ISO 9001: 2015. The Board accordingly has started the process and the first kick-off meeting of the project was held at NPC, HQ on January 19, 2016. The project implementation plan

The kick–off meeting in progress, seen in the picture: Mr. C. K. Biswas, CEO, NBQP and Mr. Siddharth Sharma, DDG, NPC and other officials

has been drawn up and the entire process has been targeted to be completed within four months. The Board wishes to congratulate NPC for taking the decision of going forward to implement ISO 9001:2015. The implementation process will help both NPC and QCI gain insight of the revised standard and how it helps an organization adapt to a changing world.

Extract of Guidelines for the 10th Cycle

1. Application Fees

For Micro & Small Sector, NGOs, Education and Government Sector the application fees(inclusive of service tax 14.5%) will be Rs.572/-per project. For Organizations belonging to Medium and Large Sector, the application fees (inclusive of service tax) will be Rs. 8587/-per project.

2. The Awards

A certificate of appreciation will be given to all those projects which will undergo final site verification. The final decision on the Awards will be taken by the Jury constituted by the QCI.

3. Eligibility for the Award

This award is open to all type of organizations/sectors (Govt. of India, Public sector, Private sectors, Finance, Manufacturing, Power, Infrastructure, Healthcare, Education, and NGOs etc.). The organization should be located in India.

An organization submitting projects, must satisfy the following conditions:

- The organization has not been convicted by any Court for any irregularities. Projects once awarded will not be considered again.
- A Unit/ Organization can submit their 3 best projects (max).

4. Assessment Criteria

The assessment of the projects will be made on the basis of various parameters which have been identified by a team of experts from QCI and D.L.ShahTrust. Emphasis will be placed on the following key parameters;

1. Problem/solutionclarity.
2. Ingenuity and Innovation in approach.
3. Data source and collection.
4. Technical approach.
5. Team working.
6. Diagnosis of the problem(rootcauseanalysis&qualitytoolsdeployed).
7. Bench marking used in the project.
8. Impact of the project: tangible benefits, intangible benefits or socio economic and enviro benefits.
9. Sustain ability of the project.
10. Standardization & Horizontal development.

Note 1: Projects should clearly mention the benefits achieved.

Note 2: The project should demonstrate application of appropriate quality tools and techniques.

Note 3: Projects which have concluded or live projects which are expected to yield results by March 2016 / during the site visit will be considered.

5. Assessment Process

The team of experts nominated by the QCI will be carrying out the assessment of the projects submitted.

The projects will undergo the following phases of assessment

Stage1: Online Application

Applicants are required to submit details pertaining to following two fields mandatory & optional:-

a) **Form A:**-Organizational details b) **Form B** :-Project details

Stage2: Preliminary Screening:- Document Assessment:

All eligible applications will undergo document assessment by the Assessment Team. The projects will be scored based up on the above assessment parameters.

Stage3: Project Presentation at QCI office

To objectively comprehend and seek clarifications from the project team that have actually executed the project.

Stage4: Site Verification for project implementation

To ensure that the claims made in the project including savings as well as tools employed are verified.

Stage5: Final Selection and communication

NBQP Secretariat will for ward the assessment report and recommendations of the assessment team to the Jury for final selection of the awards. The jury will comprise of eminent experts appointed by NBQP/QCI and the D. L. Shah Trust.

Note: The Awards will be presented during the forthcoming **11th National Quality Conclave of Quality Council of India** to be held in New Delhi,19th -20th August 2016.

6. Non-disclosure and confidentiality

The name soft the applicants and scoring system developed for the assessment process will be regarded as proprietary and kept confidential.

7. Cost to be borne by the applicant organization

a. Presentation at QCI.
b. Cost of the assessors, travel and stay during site verification.

8. For Submission of Application please visit http://qcin.org/nbqp/DLSHAH/index.php .

Attachment training on ISMS for PAC member bodies

NABCB conducted an attachment training for participants from member Accreditation Bodies of Pacific Accreditation Cooperation (PAC) within the Asia Pacific region from November 24-28, 2015 in New Delhi. Three participants from Malaysia, Mongolia and Sri Lanka attended the training.

The attachment training was supported by Pacific Accreditation Cooperation (PAC) and Physikalish Technische Bundesanstalt (PTB), Germany. The training facilitated better understanding of the accreditation standards, and functioning of an accreditation body and its processes. The training also included an observation of an assessment of a certification body, TUV SUD South Asia Pvt. Ltd. in Mumbai carried out by NABCB and visit to another accredited certification body, Maverick Quality Advisory Services Pvt. Ltd. in Delhi.

The training was facilitated by Mr. Anand Bhatnagar, NABCB ISMS assessor and Mr. M. Jena, Joint Director, NABCB and coordinated by Ms. Vani Bhambri Arora, Deputy Director, NABCB.

NABCB keen on organizing Awareness Programmes

In order to spread awareness on accreditation and its benefits to the industry, NABCB has undertaken a series of Industry Awareness Programmes which covered the topics such as benefits of international equivalence of accreditation for industries; guidance on selection of certification bodies for ISO 9001 certification; and guidance for industry on complaint handling mechanism. NABCB conducted three such programmes on January 19, 2016 at Meerut in partnership with WASME, on January 22, 2016 at Faridabad in partnership with EEPC India, and on January 29, 2016 at Ludhiana in partnership with CII.

NABCB plans to conduct more such programmes in partnership with industry bodies such as CII, FICCI, IEEMA, WASME, etc in the country. One of such programme is scheduled on February 24, 2016 at Pune in partnership with EEPC India.

Apart from the industry awareness programmes, NABCB is also organizing Consumer Awareness Programmes for making consumers aware on Quality of Products and Services in partnership with Consumer Coordination Council (CCC) to educate consumer organizations in small cities. One such programme was held at Ajmer on January 23, 2016. NABCB plans to conduct more such programmes jointly with the Consumer Coordination Council and the next programmes are planned at Ujjan on February 27, 2016 and at Kolkata on March 19, 2016.

Mr. Anil Jauhri, CEO, NABCB addressing the participants during one of the programmes

LEAN MANUFACTURING
COMPETITIVENESS SCHEME (LMCS)

Introduction

National Accreditation Board for Education and Training (NABET) is a constituent Board of Quality Council of India. NABET has been appointed as National Monitoring and Implementing Unit (NMIU) for up-scaled version of Lean Manufacturing Competiveness Scheme of Ministry of Micro, Small and Medium Enterprises (MSME).

- Strong performance of MSME sector is necessary for us to achieve the objective of rapid and inclusive growth.

- The scheme aims at enabling MSME's for elimination of non-value-added activities, resulting in a more **"lean," competitive, agile, cost reduction, cycle time reduction, "waste" minimization,** and be market-responsive company through implementation of Lean Tools and Techniques.

Lean will Improve

- Quality performance, fewer defects and rework (in house and at customer)
- Fewer Machine and Process Breakdowns
- Lower levels of Inventory
- Greater levels of Stock Turnover
- Less Space Required
- Higher efficiencies, more output per man hour
- Improved delivery performance
- Faster Development
- Greater Customer Satisfaction
- Improved employee morale and involvement
- Improved Supplier Relations
- Higher Profits!

About The Scheme

- Clusters are being formed comprising of 6 -10 units.
- Lean consultants implements various Lean Tools and Techniques depending on the need and requirement of Industry for a period of 18 months.
- Fees of lean Consultant is being subsidized in the scheme.
- 80% fees of Lean Consultant is being borne by Government of India while 20% cost of lean consultants needs to be borne by Industry.

National Manufacturing Policy envisaged manufacturing sector to reach a target of 26 per cent of the national GDP by 2022. Describing manufacturing as the main engine for growth of the economy

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Reforming skilling landscape in India: Role of QCI

There have certainly been some significant changes that have been witnessed as far as the Quality improvements and skilling benchmarks are concerned through Accreditation of Industrial Training Institutes (ITI)/Vocational Training Providers (VTP) at National Accreditation Board for Education and Training (NABET), Quality Council of India (QCI). Shri Sharda Prasad, IAS, Chairman, NABET – ITI Accreditation Committee, Formerly - Director General, Directorate General of Training, Ministry of Skill Development and Entrepreneurship (MSDE), Govt of India, shares more on the benefits of accreditation.

By | Dr. Indrajit Bhattacharya
      Director, NABET

What is the role of ITIs in skilling India?

ITIs traditionally have been the only institutions where young people come for a career in industries and they have been working since 1950s and these institutions are the main source of supply to the industry. So, as manpower providers, the role played by them becomes very crucial for a country.

Why QCI was identified for evaluation of ITIs under the NCBT?

Unfortunately, earlier we didn't have the system of accreditation of the ITIs. As a result of it, infrastructure was deficient, sometimes, quality of training was sub-standard, and therefore the government decided that we should introduce a system of accreditation of these institutions. For the purpose of accreditation, QCI was identified as the nodal body. That is how the system of accreditation is now being carried out by QCI.

How QCI has played an important role in improving quality initiatives in skilling through ITIs?

QCI is the apex body for ensuring quality of different kind of institutions and therefore government decided that these ITIs should be accredited. The government has certain norms for classrooms, workshops, tools and machinery, and trainers, etc. These have been given to QCI. On the basis of these norms, QCI sends its assessors to different institutions who verify the infrastructure and on the basis of that they recommend them accreditation. On the basis of that accreditation, when granted by QCI, the government grants them the affiliation to the national council bodies.

How QCI played a role in upliftment of the accountability in terms of participation, in terms of credibility and in terms of transparency?

The role of QCI has been very important. There is a role played by infrastructure in accreditation, so all the promoters of ITIs whether it is the private sector or the government, are requested to upgrade the infrastructure that has been created by way of classrooms, trainers, tools, workshops and various other things that

Shri Sharda Prasad

are required to set up an ITI. There is a first stage, the assessment; the infrastructure has to be satisfactory, only then the assessor is sent to that ITI for assessment of the infrastructure facilities. And if it is not complete, the promoter is advised to carry out modifications or additions or whatever is required to complete the infrastructure. And therefore, this government or the private entity, is supposed to be giving everything and it is uploaded on the website so that there is total transparency and anybody could see whether infrastructure is complete or not. Similarly, it also makes the government as well as private entity accountable to the students who come there for training. In terms of participation, all these ITIs are asked to prepare their websites and whatever comes under the infrastructure-training, number of students, placements,

etc-is uploaded on the website and if anybody wants to see, they can have a look and this ensures total transparency by the institution and also, encourages participation by the trainees. In terms of credibility, this system has been put in place and everybody knows that these are the norms and standards and anybody can verify. After the accreditation by QCI, it is supposed that the entire infrastructure is in place and one can predict such kind of quality, accountability, participation from stakeholders in this process.

How this project has helped in contributing towards youth participation and leadership, towards innovation, towards community impact, towards scalability and sustainability?

This is very important because once we accredit these institutions, the quality certainly goes up in terms of training and this system has been introduced for about two years now. The number of institutions which have been accredited till now has gone up from 1000 to more than 1600 /1700 per annum. This is a record which is more than received earlier. Therefore, it encourages people to come forward because there is total transparency in accreditation. People don't like to go anywhere, they have to upload their papers. Earlier there used to be large number of papers to be submitted but now everything is online and therefore private promoters are encouraged to set as many institutions as required in their area. This also encourages you because now there is an easy

> *QCI is the apex body for ensuring quality of different kind of institutions and therefore government decided that these ITIs should be accredited and government has certain norms for classrooms, for workshops, for tools and machinery, and trainers, etc. which have been given to QCI.*

availability of these institutions in their area. Earlier, they had to travel long distances. This is a kind of innovation in the sense that the quality of training is ensured. The first stage is accreditation; the next stage is what is known as grading. So, it can be plus one, two, three or four, or better kind of technology can be used. Grading will give a choice to the trainees as well as parents to opt for whichever ITI is better as per grading. Sub standard ITIs will automatically get eliminated. And this will improve not only the quality of training but the quality of workers supplied to the industry at a larger scale.

What could be the further areas of improvement in ITIs? How can QCI play a role?

The future is surveillance. Earlier when some institution used to get an affiliation, it used to be for the whole life but now it is for five years. Once you get accreditation by QCI, you can run the institute for five years but a system of inverse surveillance has been introduced. Every ITI will be inspected every year and it is not only the fiscal infrastructure, the placement, the quality of training, the remuneration will also be inspected. It will encourage these ITI's to excel and supply the best quality manpower to the domestic industry as well as global market. Therefore, the system of surveillance is the next stage in which the performance of the faculty as well as students is monitored and their performance will definitely get enhanced through this.

Voluntary Certification Scheme for Medical Devices

Association of Indian Medical Device Industry (AIMED), in collaboration with the Quality Council of India (QCI), will be shortly rolling out a voluntary quality certification scheme for medical devices to fill the regulatory vacuum in medical devices in the country.

By | **Anil Jauhri**
CEO, National Accreditation Board for Certification Bodies

The Voluntary Certification Scheme for Medical Devices is intended to enhance patient safety and provide enhanced consumer protection along with much needed product credentials to manufacturers for instilling confidence among buyers. This move is also intended to significantly eliminate trading of sub-standard products or devices of doubtful origins, a widespread and injurious phenomenon in the Indian market. It also aims to bring down the substantial time and cost-run to obtain globally accepted quality certification for Indian companies and eliminate the malpractices of sub-standard or fraudulent certification or quality audits.

Under the Scheme, a Steering Committee under the chairmanship of Dr M K Bhan, Former Secretary, Department of Biotechnology, has been set up as the apex body, assisted by two more committees, a Technical Committee responsible for formulating the technical criteria and a Certification Committee responsible for devising certification process and rules for certification bodies to be used under the Scheme. More than twenty government and non-government organizations have come on board as part of the Steering Committee to support the Scheme, from organizations such as the Department of Commerce, Confederation Of Indian Industry (CII), National Health System Resource Centre (NHSRC), Bureau of Indian Standards (BIS), Central Drug Standard Control Organization (CDSCO), Center for Bio-Medical Engineering, IIT Delhi, Indian Medical Association (IMA), Association of Healthcare Providers (AHPI), Engineering Export Promotion Council (EEPC), Associated Chamber of Commerce and Industry of India (ASSOCHAM), etc.

A Technical Committee under the Chairmanship of Rajiv Nath, Forum Coordinator of AIMED, has identified globally accepted quality norms for various categories of medical devices and their suitability for India. The Committee is developing three levels of certification criteria for medical devices as:-

- ICMED 9000 (Based upon ISO 9001 plus additional requirements)
- ICMED 13485 (Based upon ISO 13485 plus additional requirements)
- ICMED 13485 Plus (Based upon ISO 13485 plus additional requirements plus Product Specifications of Ministry of Health and Family Welfare)

All the above three levels of standards would be finalized shortly and draft standards for all the three Levels would be presented to the Steering committee for its approval. The Certification Committee under the Chairmanship of B. Venkataram, former Secretary General of QCI, is developing common process for certification and rules for certification bodies to ensure credible certification.

The certification bodies would need accreditation to international standards such as ISO 17021 and ISO 17065 from NABCB, which is a signatory to the international mutual recognition arrangements of the International Accreditation Forum (IAF). This would provide international acceptability to the medical device industry and enhance its competiveness in the world market besides assuring the domestic consumer of the quality.

Grading and Accreditation of Industry Associations/ Business Membership Organisation (BMO) by NABET

As we all know, industry associations or Business Membership Organizations (BMOs) play a key role in promotion and development of micro, small and medium enterprises. To bring greater transparency in the functioning of BMOs, while ensuring standard of quality and performance, 'Accreditation of BMOs' was introduced to ensure minimum standards of governance, operations, quality and performance amongst them.

By | Dr. Indrajit Bhattacharya
PhD (BIT, Ranchi), Director, NABET

Business Membership Organizations (BMO) i.e. Industry Associations and chambers serve as critical link between entrepreneurs, government and other stakeholders and service providers. Quality Council of India (QCI) along with Micro, Small and Medium Enterprises (MSME) offers accreditation standards and requirement for Business Membership Organisations (BMOs) in line with global best practices. This is the first-of-its-kind quality-centric initiative for BMOs, which serves as a critical link between entrepreneurs, government, other stakeholders and service providers and plays an important role in the development and promotion of MSME.

National Accreditation Board for Education and Training (NABET), a constituent Board of Quality Council of India, in association with MSME has developed an accreditation and grading criteria for BMOs, comprising industry associations and chambers, in India. Accreditation initiative is aimed at encouraging BMOs to be an active partner in MSME promotion and build their capacity with transparent functioning. The Voluntary Accreditation of BMOs in the country was launched by Secretary, MoMSME with a view of ensuring greater transparency in their functioning and minimum standards of governance, operations, quality and performance amongst them. The objective of accreditation is to establish a standard of organizational competency amongst the BMOs, at the same time enabling a mechanism for government, banks, large buyers, national and international agencies to partner with better performing BMOs. BMOs, having predominantly membership from large enterprises, have grown but the growth story is not the same for BMOs serving MSME.

As per Vipin Sahni, CEO, NABET, "We have to increase the contribution of Manufacturing Sectors to our Country's GDP.

Benefits of Accreditation

Mark of Quality, Credibility and Capability amongst stakeholders

Benefits in leveraging funds from other national and international agencies

Benefits in Accessing Government Schemes & Grants

Provides Opportunities for National & International Strategic Linkages

Professional benefits – Management Control & Self Discipline

Creating Mechanism for Planning, Measurement, Review and Continual Improvement

Aligning with international practices

This will ensure the economic prosperity through creation of jobs for the skilled manpower. Associations play a very important role and are very important for the prosperity of the nation. NABET, QCI is working with all the important constituents: MSME, Vocational Training Providers and Industrial Training Institutes. Now it will be working with BMOs. This will help in creating world-class skilled workforce."

Accreditation system follows a graded approach for recognition and BMOs are being accredited under three grades–Silver, Gold and Diamond–on the back of stringent quality and competence processes.

The accreditation and grading helps the BMOs partner with government and engage in public policy dialogue and establish linkages and enter into strategic partnership with academic and management institutions, research organizations and service providers. The accreditation certification will help BMOs find new clients/markets where the services can be rendered.

An accredited BMO will draw interest from corporate, financial agencies and other institutions to act as an intermediary for reaching out to MSMEs on various issues.

Promoting Quality in Services: A suggested strategy

There is a growing worldwide trend towards setting standards for not only manufacturing industry, which chiefly initiated the standardization activity, but also for organisations, services, processes, systems, etc.

By | Anil Jauhri
CEO, National Accreditation Board for Certification Bodies

The standards can be classified into two distinct categories, ones which are mandatory and compulsorily enforced by law, actually called technical regulations, and the others which are voluntary in nature and ideally are market driven. Whether technical regulations or voluntary standards, implementation of these needs measurement either by testing or inspection or certification or any combination thereof and 'conformity assessment', as these activities are called, has also grown worldwide as a consequence.

The WTO Agreement on Technical Barriers to Trade (TBT Agreement), the mother agreement on standards and conformity assessment, although meant for goods, serves as an excellent reference point as its principles can be applied equally to services , processes, systems, etc.

The TBT Agreement mandates the member countries to impose technical regulations on the grounds such as the following primarily to protect their populace:

- National security
- Health
- Safety
- Environment
- Deceptive trade practices. There can be other justifiable grounds for imposing regulations in public interest.

The above means that there would be certain sectors (healthcare, education, etc) which would be governed by regulations while a large number of other sectors would be driven by voluntary standards.

Even in regulated sectors, there could be voluntary standards pitched higher than regulatory standards and promoting excellence through voluntary certification/ accreditation, as applicable.

APPROACH

1. In the first instance, it would be desirable to identify services which are important to Indian economy.
2. The next step would be to decide which ones of the identified services need to be regulated in public interest – healthcare on grounds of health, education on grounds of possibility of deceptive practices, private security services on grounds of national

interest, etc. There could be other sectors where there could be deceptive trade practices and government needs to enforce certain minimum requirements,e.g. many wellness centres would claim to be Ayurvedic– these would need to be regulated.

3. The rest of the services would have a voluntary standards regime.
4. In sectors where minimum requirements need to be imposed in public interest, like education and healthcare, this needs to be done through an appropriate legislation by the government.
5. In several service sectors such as education, regulations do exist but these may not be based on the best international or administered effectively. We need to review these regulations to upgrade them to international standards, wherever possible, and improve their enforcement through international best

Anil Jauhri

practices.

6. There may be sectors which need regulation but there is none at present. The task of developing regulations in such sectors needs to be initiated. It would help if India has an open-ended legislation which allows the government to notify regulations in any service sector rather than rely on sector specific regulations. Such a need has already been felt in goods and emerged as a recommendation in the Standards Conclave 2014.

7. Even in case of regulated services, which generally would be to minimum requirements acceptable, we should encourage voluntary certification/accreditation to higher standards to promote excellence. Accreditation and certification should remain voluntary and be a means of promoting excellence by constantly pushing the standards upwards. These roles need to be clearly separated and defined.

8. The approach in para 1.7 above would also need to be adopted in situations in paras 1.5 and 1.6 above, both of which need time, while voluntary initiatives can be developed in much shorter time frame.

9. When such voluntary certifications/accreditations are based on standards which also require compliance to regulations, these could be accepted as demonstration of compliance to regulations by the concerned regulators leading to relaxed oversight on such organizations thus not only promoting regulatory compliance but also incentivizing excellence. E.g. regulations of UGC and AICTE could be supplemented by accreditation programmes based on higher standards or regulations under the Clinical Establishment Act could recognize accreditation of medical labs as per ISO 15189 by NABL or NABH accreditation of hospitals as demonstration of compliance to regulations and regulatory oversight relaxed. Some of this is already being practiced but we need to have a clearly stated policy in this regard.

10. In the voluntary sector, e.g. consulting services for quality, etc., voluntary certification/accreditation as applicable should be put in place. This would mean developing standards for the services and having a system of verifying compliance and certification/accreditation. E.g. Sector Skills Councils established under the National Skills Development Policy are developing not only standards for competence of individuals in their sectors but also for training services. They have also developed some system of certification/accreditation.

11. These standards invariably could be based on international standards if available in these sectors which would act as market differentiator vis-a-vis uncertified services providers.

12. One of the key to India's growth in services sector would be adherence to the highest standards of quality. There is need to adopt international standards of international standards setting bodies such as ISO in services. It should be remembered that most standards are made through a consensus process which means these are the most acceptable standards rather than the highest standards – it is therefore possible to do better than international standards.

13. This needs to be complemented by benchmarking against the best industry practices around the world to keep up with competition and strive for excellence on an ongoing basis. This calls for maintaining a database of the best industry benchmarks in various sectors which is constantly updated.

14. There are areas where India is strong – such as IT sector where India should set standards which should go on to become international standards – or areas of India's traditional practices – such as Ayurveda or Yoga – where India should set standards and the world should look for authentication by India.

15. To achieve a leading position in the world in services, India needs a strong quality infrastructure and role clarity among various bodies. There is a tendency to bundle several roles into the same organisation. It has to be realised that conflict of interest is one of the most evolving issues worldwide and hence the need for clearly defined roles.

16. QCI, in its accreditations, in area of conformity assessment like certification and inspection by the NABCB or healthcare by NABH, has achieved international equivalences which would help Indian industry gain international acceptance. QCI has also pioneered programmes such as accreditation of environmental impact consultants which do not exist in most countries and which should be marketed abroad and services of our accredited consultants exported.

17. NABCB has an MoU with NASSCOM to develop a system of certifying training providers as well as IT professionals and if these standards developed by NASSCOM can be made internationally acceptable, QCI's accreditations would demonstrate compliance by internationally acceptable means and enhance the international acceptability of the training providers as well as IT professionals.

18. Similarly, the Department of AYUSH has sought QCI's help for designing a personnel certification programme for yoga experts and if a credible programme can be developed, it would provide for authentication of yoga experts worldwide.

19. Ayurvedic wellness centres are another area where QCI can make a vital contribution. There are hundreds of ayurvedic spas in Germany and an Indian authentication of such spas is potentially possible.

20. These are some of the examples where QCI is involved – we are sure there are several other examples of India's services sector matching the best.

21 Once the overall approach is agreed to, we can identify what infrastructure is needed to execute this approach and identify the right organisations to carry this forward.

A Decade of NABH Operations

By | Dr. B K Rana
Joint Director, NABH, Chairman-ISQua Accreditation Council and Director of the ISQua Board

National Accreditation Board for Hospitals and Healthcare Providers (NABH) is a constituent board of Quality Council of India. It was set up in 2005 to establish and operate accreditation program for healthcare organizations in India. It completes a journey of 10 years as first accreditation standard was launched in February 2006. At the Board level, eminent healthcare leaders have led this organization to the present status. Dr. P K Dave as its first Chairman laid a strong foundation and Dr. Narottam Puri, the next Chairman took NABH to the next level. The current Chairman, Dr. Nandakumar Jairam is putting his best efforts to carry forward the legacy of this organization and implementing new strategies to widen its scope into new areas. Important to mention that while the Board gave strategic directions, policies were implemented by its founding CEO, Dr. G J Gyani and now by Dr. K K Kalra.

Dr. B K Rana

At the organizational level, the top management of QCI, comprising of QCI Governing Board led by eminent personalities as its Chairman and Secretary General provided all necessary support, direction and leadership in the best interest of NABH. The Board has seen QCI Chairmen Dr. R A Mashelkar, Mr. Ajay Shankar, Mr. Arun Maira, Mr. Saurabh Chandra, Mr. Amitabh Kant and the current Chairman Mr. Adil Zainulbhai. No organization can produce desired results without support from administration and therefore role of administrative head of the organization is of paramount importance. NABH has been fortunate to have excellent leaders as QCI Secretary Generals to drive the cause of organization starting from Dr. G J Gyani, Mr. B Venkataraman and the current Secretary General Dr. R P Singh.

Vision- To be the apex national healthcare accreditation and quality improvement body functioning at par with global benchmarks.

ISQua Accreditation Council meeting at JCI office in Oak Brook, Illinois

Mission- To operate accreditation and allied programs in collaboration with stakeholders focusing on patient safety and quality of healthcare based upon national/international standards, through process of self and external evaluation.

Values-

Credibility: Provide credible and value addition services.

Responsiveness: Willingness to listen and continuously improve service.

Transparency: Openness in communication and freedom of information to its stakeholders.

Innovation: Incorporating change, creativity, continuous learning and new ideas to improve the services being.

Scope of NABH

- Accreditation of healthcare facilities
- Quality promotion: initiatives such as Safe-I, Nursing Excellence, Laboratory certification programs (not limited to these)
- IEC activities: public lecture, advertisement, workshops/ seminars
- Education and Training for Quality and Patient Safety
- Recognition: Endorsement of various healthcare quality courses/ workshops

Board undertook initiative to call a strategic meet in May 2015 to discuss some of the critical issues and guide NABH for future steps. NABH has reviewed its Strategic Plan and revised certain strategic goals for 2015-2018.

Currently NABH offers following accreditation programmes:

NABH participating in ASQua Board meeting and AGM at Doha, Qatar

1) Hospitals
2) Small Health Care Organizations (SHCO) including Community Health Centers (CHCs)
3) Blood Banks and Blood Transfusion Services
4) Primary Health Centers (PHCs)
5) Opioid Substitution Therapy (OST) Centers
6) AYUSH hospitals (5 standards)
7) Wellness centers
8) Medical Imaging Services
9) Dental hospitals/Centers
10) Allopathic Clinics
11) Emergency Medical Department accreditation (developed, to be launched soon)
12) Accreditation program for Clinical Trial (Ethics Committee) (waiting a go ahead from MOHFW)
13) Eye centers (under development)

ISQua Board members at its meeting in Boston

ISQua Accreditation Council meeting at JCI office in Oak Brook, Illinois

In addition, NABH offers following certification programmes:

1) 'Safe-I' which focuses on Infection Prevention and Control practices in hospital.
2) Nursing Excellence
3) Medical Laboratory
4) Pre-Accreditation Entry level for hospitals and SHCO
5) Pre-Accreditation Progressive level for hospitals and SHCO (development underway)

On request from Ministry of Commerce, we are working to develop criteria for evaluation of Medical Tourism Facilitators (MTF). This will help in providing transparent and credible services to medical travellers to India.

In addition, we also conduct training and education workshops on Clinical Audit, Management of Medication and Patient Safety, Continual Quality Improvement: Tools and Techniques, Hospital Disaster Management, Medical Device Safety Guidelines and Compliance to Ethical and Legal Issues. NABH also carries out inspections of private hospitals/ dental centers/ eye centers and diagnostic centers for empanelment by Government.

From January 1, 2016, NABH is accepting on-line application only. This is a complete web-based system for different processes involved in accreditation. Currently, about 696 (as on January, 2016) healthcare organisations have been granted accreditation/ certification.

NABH hospital standards were revised to 4th edition and submitted to ISQua for re-accreditation survey (third cycle) in December 2015. NABH is also due for ISQua organisation survey for second cycle and it is scheduled for June 2016. Under NABH International, four SHCOs were granted accreditation in Philippines in 2013 and accreditation renewal process for these organisations is going on. One hospital from Philippines is preparing for final assessment.

NABH enjoys a distinct reputation both nationally and internationally. Nationally, Central and State governments rely on NABH for healthcare quality improvements and strengthening their empanelment schemes for private hospitals. NABH could establish itself as a leading healthcare accreditation agency in the world and become a role model for many countries to start their accreditation agencies. NABH has significantly contributed to global healthcare quality initiatives including of International Society for Quality in Health Care (ISQua). NABH has been a member of ISQua Accreditation Council since 2007 and provided Vice-Chairman since 2008 and Chairman since 2014. NABH as a Board member of Asian Society for Quality in Healthcare (ASQua) has contributed significantly to Asian region. Some countries in the region are seeking support from NABH for training and accreditation e.g Bhutan, Nepal, Bangladesh, Afghanistan to name a few. This could only become possible by learning and sharing while participating in different events internationally.

Empowering Start-up MSME: Virtual to Reality

By | **Er Sanjay Bisariya**
IRAS Writer, Joint Development Commissioner, (MSME)
Government of India

Rohini Singh is in the final year of B. Tech in Chemical Engineering branch. She comes up with a novel way to improve the efficiency of Reverse Osmosis (RO) systems through a unique design. Coming from an ordinary rural background and the first IITian in her family, she seeks support from her college.

Rohini talks to her alumni, who advises her to make a working prototype to validate the process and design. She is now worried as she does not have any funds or resources to build the same. Professors guide Rohini to the college incubator which enlightens her path further. She is apprised about various MSME schemes that are offered through the incubator scheme. College incubator is a part of many incubators supported by the Office of Development Commissioner (MSME).

The Ministry of MSME is implementing one of the schemes of National Manufacturing Competitiveness Programme (NMCP) namely Support for Entrepreneurial and Managerial Development of SMEs through Incubators. The objective of the scheme is to promote individual innovators for becoming "Technology Based Entrepreneurs". Under this scheme Government of India is providing opportunity to the innovators in developing and nurturing their new innovative ideas for the transformation of new innovative products which can be sent in to the market for commercialization.

She is inspired to know that a Steering Committee meets periodically to screen proposals received from supported incubators and selects proposals for funding support assistance. She is excited to learn that the Design Clinic scheme will not only help her to create an aesthetic prototype but will also connect her with the domain experts for further enhancements. She had been also provided relevant booklets & publications from MSME, free of cost. Rohini registers her start-up with Public Sector Bank under CATCH THEM YOUNG initiative, which helps her with the further processing.

March 2016

The design experts from NID Ahmedabad are already working with Rohini. She is hopeful of proving the technology soon.

May 2016

Rohini's prototype has been proved to deliver a recovery rate of 70 per cent that too at 100 liters per hour. For a nation of Billion people, this is a breakthrough with wide applications in offices, restaurants, schools and colleges, etc. Rohini decides to file a patent for which the program-run on IPRs under NMCP comes very handy. She is able to absorb the Gritty quickly for her first patent application.

July 2016

Rohini is looking to launch the product in domestic market. She also realizes that Entrepreneurs Memorandum will enable her to get more support. She learns about Udyog Adhaar and it becomes a single point method for her to avail the facilities provided by the Ministry of MSME.

September 2016

Since July 2016, she has got 50 orders of ₹50,000 each and is looking to further expand operations for which again CGTMSE scheme of MSME comes handy for collateral free loan. Her current team strength is 10 and if all goes well, it would reach 50 by December, 2016.

November 2016

Rohini is super excited to showcase her product to the world at the India International Trade Fair at Pragati Maidan, New Delhi through MSME MDA Scheme. She gets connected with senior managers of two well known food chains and six Deans/Directors of colleges from NCR who have asked for her proposal. 11 months back Rohini was a bright young Indian with a creative idea, today she is poised to disrupt the vertical. We are proud to have been part of her journey. We hope to empower more and more Rohinis and Rohans across India on a regular basis.

To learn more about schemes that can benefit, you please do visit http://msme.gov. in/mob/SchemeNew.aspx.

How to create an Ecosystem in the Education Sector for a Quality tomorrow

Over 65 per cent of our population is estimated to be under the age of 25. The key to endowing this young workforce, with the skills requisite to the economic expansion envisaged by targets, is education. FICCI's 'Higher Education in India: 2015' paper estimates that India will have 140 million people in the 17-21 year age-group by 2030. One in every four graduates in the world will be a product of the Indian higher education system.

By | **Akshay Munjal**
    President, BML Munjal University

According to numerous studies, including a joint FICCI-World Bank Study, it has been found that only 25-30 per cent of graduates across the higher education spectrum are employable. Furthermore, while students of Indian origin perform outstandingly at foreign centres of higher-learning, not one Indian college or university has made it to the list of the world's top-100 universities.

The same studies identify a lack of appropriate industry-academia linkages as the critical reason for the lack of quality among new graduates. The feeling is that the two stakeholders only interact largely through summer internships or placements, and therefore have negligible knowledge about each other's needs - leading to an ineffective outcome.

Currently, corporates are wasting up to two years training new graduates to an acceptable level. At the same time, 70 per cent of Gen-Y employees are leaving their first job within two years of joining, according to a Forbes report; meaning companies are spending valuable time and money training employees only for the benefit to be used by another organization. This creates wastage in the economy - potentially productive employees are spending up to two years gaining basic training and knowledge.

To address the glaring deficit, it is imperative that the private sector plays a bigger role in education. The potential benefits of this are multifold - firstly, it will help adequately skill a generation of future leaders, secondly, it will create a talented workforce that will spearhead the country's economic growth in coming decades, and finally, it will allow companies to focus their resources on improving productivity, rather than re-skilling fresh graduates.

Slowly, but surely, a new breed of educationist has entered the fray - currently, one third of the enrolment in higher education is from the private sector. After the 2011

Akshay Munjal

visit of global icons Warren Buffet and Bill Gates – who met with India's most successful industrialists, they also urged them to set aside more funds for social endeavours.

With the government having diverted its attention to primary education, the emergence of private players in higher education has its benefits. Higher education in India has largely been government funded with three-quarters of the total expenditure being borne by the government. Unfortunately, public budgets cannot meet the requirements of higher education. This is why the government has

taken several new measures; one of them is to encourage privatization in higher education.

Despite the benefits, in a country where missionaries, trusts, or the public-sector, have operated most schools and colleges, private interests in education have been viewed with a degree of suspicion. Is this suspicion founded? Looking at the other models – the American one being the best example – it would appear not.

However, a number of private universities, set up by the private sector, have failed for a variety of reasons. Simply being involved and setting up a university isn't enough - there has to be a focus on improving the curriculum - exposing students to practical training, teaching them soft skills such as presentation and negotiating and selling, and giving them an exposure to the global world. To do this, faculty has to be of a certain standard, and relevant industry experience.

The majority of students in India have grown up on a learning system that forces them to memorize concepts and theories. Assessment methods involve exams that count for 100 per cent of the grade, and in the case of board exams, decide students' future for the next 3-5 years. These exams do not assess higher-order thinking skills; they only measure memorized knowledge. For a student to succeed in the workplace, it is imperative that they learn and understand concepts, and are able to apply them to abstract and complex practical issues.

To address this, the curriculum taught across universities in India needs to be re-focused to impart what a World Bank Study (2010) call 'professional' skills (creativity, problem solving, understanding of contemporary issues) and 'communication' skills (written and verbal communication, data analysis, and basic computer skills). This survey found that Indian graduates lag far behind than their American counterparts in skills such as "applying problem solving skills" and "communication and teamwork" - skills that are crucial and arguably the most important to succeed in the workplace.

Again, a closer relationship between industry and academia will help resolve this issue. At BML Munjal

University, inputs from industry have been embedded into the curriculum from the beginning. The curriculum has been designed to focus on practical learning - in order to make graduates adept at applying theoretical knowledge in a practical, real world setting. To this end, industry partners such as IBM, KPMG, and Siemens have directly collaborated to set up programmes or establish on campus industry run labs or centres of excellence. This allows students to work on real-life projects, learn how to use machinery and equipment used by industry, and gain experience in using the software used at leading corporates across India and the world. Experts from leading corporate routinely visit the campus to teach students using real life cases and examples, and also hold leadership talks to share the challenges they faced and the paths they took en route to success.

The current relationship between universities and industry seen across India focuses solely on placements and internships. However, the majority of internships are considered to be a waste of time, as the organization struggles at the last minute to find work for the interns, and the university doesn't have the time nor the manpower to supervise and nurture students who are undergoing internships.

At BMU, we have addressed this issue by introducing the Practice School concept - a unique internship concept where the faculty from BMU, and a practice school manager from industry work together to identify projects or problem banks for students to work on, and continuously monitor and grade students throughout the length of the internship. This grade counts towards students' CGPA. The benefits are twofold - a company gets a direct opportunity to evaluate a bright and talented student's suitability for employment, thus reducing the cost of hiring fresh graduates; and a student gets an opportunity to work on real-life projects of direct relevance to his interests, allowing him to gain valuable, relevant practical experience.

Moreover, the curriculum at BML Munjal University is made up of core courses, skill courses such as conflict resolution, presentation, and selling and negotiation that improve students' soft skills, and perspective courses such as living arts, literature, and world civilizations that expand student's horizons, and elective courses that allow students to explore their interests. Learning also takes place outside the classroom - the lessons learnt from sports, clubs, and social service are vital to make a student well rounded.

With India poised for big things, the need of the hour, for industry and education, is to join hands. As in the American system, and other places in the world, private know-how and funds have helped create institutions where the emphasis is on learning, and not memorizing. Industry-partnerships have benefited not just students for training and learning opportunities, but also faculty who've created more relevant course material. In India too, the coming together of business and learning must be viewed as a national imperative in order to allow India to take the leap to become a true global power.

Accreditation of Skill Certification Bodies as per Global Norms by NABET

Requirement of highly Skilled workforce has become the order of the day across the globe. However, India is facing a big challenge ahead as the country has a dual situation of severe paucity of highly-trained, quality labour, as well as unemployability of large sections of the educated workforce that possess little or no job skills. Countries with higher levels and better standards of skills adjust more effectively to the challenges and opportunities in the domestic and international job market.

By | C S Sharma
Dy Director, NABET-QCI

To achieve and maintain the world-class quality in the complete skill development eco-system, India drastically needs a system for accredited certification of skilled manpower as per global norms. This will help our skilled manpower to demonstrate their competence to practice a particular skill or skill set, and ultimately bring out an effective milestone to achieve PM's vision of making India as skill capital of the world.

C S Sharma

Certification	Certificate
• Results from an assessment process that recognizes an individual's knowledge, skills and competency in a particular specialty • Typically requires professional experience • Awarded by a third-party, standard-setting organization • Indicates competency as measured against a justifiable set of standards, usually by application or/and exam • Certification may require a certain amount of experience in a profession to be considered for a certification • Has on-going requirements in order to maintain; holder must demonstrate he/she continues to meet requirements (Valid for defined period)	• Results from an educational process • Awarded by educational programs or institutions • Course content determined by the specific provider or institution, not standardized • Demonstrates knowledge of course content at the end of a set period in time • A certificate can be obtained after the successful completion of a course by any participant • Life-long validity
From above , it is clear that a certificate is more academic oriented when compared with certification that is linked with endorsement of competencies to practice.	

In many areas where purchaser, user and public confidence in the competence of individuals is extremely important, certification of persons validates the competence of certified individuals to perform specified services or duties. This is achieved through the certification of competence.

Certification bodies for persons or Conformity Assessment Bodies (CABs) are those which are involved in assessing the individuals' necessary competencies, and ensuring that these are appropriate to the work being performed.

At this stage, it is very important to understand the difference between 'Certificate' and 'Certification'.

Although certificate and certification appear to carry similar meaning, there is a wide difference between them.

To build up the structured system for skill certification in India, National Accreditation Board for Education and Training (NABET) is operating a scheme for accreditation of Conformity Assessment Bodies (CAB) , as per ISO/IEC 17024:2012–General requirements for bodies operating certification of persons, which is a global standard.

ISO/IEC 17024:2012 standard encompasses requirements for-

• Organizational structure and Management system elements

• Impartiality
• Competence of personnel,
• Confidentiality and openness
• Responsiveness to Complaint and Appeals
• Responsibility

So, an assessment body must describe the certification process, how candidates are evaluated and must define periods of recertification. In addition, the CAB must be able to demonstrate how conflict of interest is managed and must have mechanisms in place to objectively evaluate the outcome of the certification process.

Benefits of the scheme are enormous. It will ensure that industries are able to hire personnel with relevant skill sets and competencies without further investment to train the staff. Apart from this, bodies implementing the system will have certification mechanism according to international benchmark.

Therefore, it can be concluded that scheme will enhance employability for the skilled-certified individuals,
build confidence of the prospective employers and enable cross-frontier recognition of skilled manpower.

NABET: Opportunity to establish quality ITIs- catalyzing exponential growth in industries…it is time for India to have 'arrived'!

In a knowledge economy, growth is highly dependent on the seamless availability and quality of human capital. Whether it be skilled workers for an increasingly automated manufacturing sector or entry-level blue collar jobs for the services sector, substantial gaps in human resources is holding back the transformation of India from an agrarian and informal services-based economy to one focused on world-class manufacturing and value-added services.

By | Vipin Sahni
CEO, NABET,
Dr. Indrajit Bhattacharya
Director, NABET

Due to increasing demographic differentials, the countries are becoming less stringent and immigration is growing. Despite all the rhetoric against it, there is no such concept as 'over-supply' of skills, at least at the more basic skill set level, anymore.While India is getting ready to the dream of establishing 'Smart Cities', upscaling of 'Skilling' becomes pertinent for enabling highly skilled industry technicians, informaticians, electricians, auto-industry workers, beauticians, loom operators, construction workers, machine operators, health workers and factory workers trained for contributing to standardized set of industry-linked capabilities. Also, specialised uniform skilled training increases worker mobility, decreases training costs for corporates and allows industries to scale up faster while checking cost escalation. Now it becomes all the more imperative to create all pervasive pool of skilled human resources by establishing high quality ITIs quickly,catalysing exponential growth in industries,…it is time for India to have 'arrived' !

"In the last century, we were very proud of IITs. It is a very good thing no doubt but in this century, we need to think about ITIs and give it the same importance. No one looks at the real *Rashtra Nirmatas* (nation builders), the real *Vishwa Karmas*. It is the small *Karigar* who will think of making things perfectly. The nation is built by their hands, it is they who take the nation ahead. The more the skilled manpower, the more the productivity, the better manufacturing and this will increase exports" - Shri Narendra Modi, Prime Minister of India.

Industrial Training Institutes (ITI)

'Industrial Training Institute' are training institutes that provide training in technical field (engineering and non-engineering subjects) that cultivate, train and nurture technical and innovation oriented minds of the younger generation. ITIs have long been constituted under Directorate General of Training (DGT), Ministry of Skill Development and Entrepreneurship, Union Government of India. The duration of course may vary from one year to three years depending upon trade opted, for example electrician, automobile engineer, architect, fitter, welder, etc. After completion of the desired period of competency-based skill training, the incumbent becomes industry ready nationally or internationally in the respective trade, catering to the manufacturing industry orrelated technical fields.

Why Open Quality ITIs ?

- 60 per cent of the Indian population is rural, who are the larger segment of target candidates.
- There is a huge requirement of highly skilled specialised workers in industry today such as construction, fitter, welder, electrician, automobile engineers, diesel mechanic, architects, etc. This requirement is growing day-by-day as the market is growing.
- Due to the advent of technology and smart 'Supply Chain Management (SCM)', margins for 'traders' are diminishing – encouraging innovation in manufacturing.
- ITI caters to the Manufacturing sector which would strengthen the 'Make in India' and 'Digital India' , 'Smart Cities' programmes.

ITIs of tomorrow

- ITI qualifiers are the backbone of any manufacturing industry, providing manpower at competitive rates,

fuelling growth in manufacturing sector. This justifies the everlasting demand of ITI qualifiers.

- Our national leaders are promoting the manufacturing in India and abroad. The demographic differentials would fuel exponential demand for quality ITI technicians in coming years.
- Due to lower investments required for establishing an ITI institute, than degree institutes, one has an opportunity to establish multiple institutes at multiple locations, after gaining initial experience from the first.
- One can introduce niche branches such as textile mechatronics, mechanic medical electronics, automobile engineers, CAD architectsetc to create an edge over competitors and offer trained manpower in highly specialised fields required for building 'Smart Cities' of tomorrow.
- It is also encouraged to align courses to National Skill Qualification Framework (NSQF) as per guidelines of National Skill Development Authority (NSDA) based on Sector Skill Council (SSC) specific Qualification Packs (QP); and nurture them to become Centres of Excellence (COE).

Who can open quality ITIs?

There are no official binding in terms of qualification or experience requirements to be able to open an ITI. Any interested stakeholder passionate for quality education and skill promotion, and interested in serving the society and industry offering skill development services, financially stable enough as per project requirements, can start an ITI.

Who accredits and affiliates ITI?

DGT: Directorate General of Training, under Ministry of Skill Development and Entrepreneurship. This is the main Central Govt. body which grants the NCVT affiliation to the Govt./Private ITI.

NCVT: The National Council for Vocational Training is an advisory body, set up under DGT, Government of India. The Council has been entrusted with the responsibilities of prescribing standards and curricula for craftsmen training, advising the Government of India on the overall policy and programmes, conducting All India Trade Tests and awarding National Trade Certification. https://ncvtmis.gov.in/

QCI: Quality Council of India (QCI) was set up jointly by the Government of India and the Indian Industry, to establish and operate national accreditation structure. QCI is registered as a non-profit society with its own Memorandum of Association.www.qcin.org

NABET: National Accreditation Board for Education and Training (NABET), one of the constituent Boards of Quality Council of India (QCI) is responsible for handling the process of Accreditation of Government and Private Industrial Training Institutes. http://nabet.qci.org.in/skill_training/GPITI.asp

Role of National Accreditation Board for Education and Training (NABET) in contributing to quality and growth of ITIs

"What gets measured, gets improved."– Robin S. Sharma. For establishing quality ITIs , it is pertinent to implement third-party due diligence.

Giving importance to Quality along with quantity, National Accreditation Board for Education and Training (NABET), Quality Council of India, was introduced for undertaking due diligence for 'accreditation' since September 1, 2012. Currently, there are over 14,000 ITIs having over 17,48,000 seats; under Directorate General of Training (DGT), Ministry of Skill Development and Entrepreneurship (MSDE), Govt. of India.
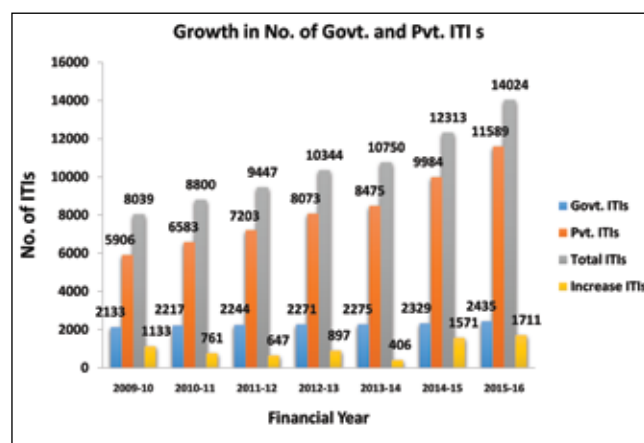
NABET /QCI accreditation of ITIs after 2012

As per International Standards Organisation (ISO)

- **Certification** – the provision by an independent body of written assurance (a certificate) that the product, service or system in question meets specific requirements.
- **Accreditation** – the formal recognition by an independent body, generally known as an accreditation body, that a certification body operates according to international standards.

Accreditation features:

- To assess Training institutes so that they meet defined quality standards.
- To foster excellence in the institutes, building effectiveness in delivering competency-based education and training.
- To establish framework for continual improvement and periodic opportunity to benchmark with other institutions.
- To facilitate developing professional competence of the students.
- Enable surveillance to ensure infrastructures and quality of training in the institutes
- To bring in competition among the institutes to continuously strive for excellence through a grading system.

Quality Reader's Digest:
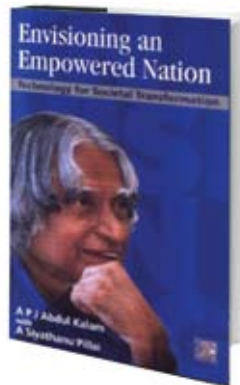## Envisioning an Empowered Nation: Technology for Societal Transformation

This book by Dr. Kalam is a logical extension of his other books with a specific focus on use of technology to realize India's dream of becoming a developed nation by 2020. First, the book outlines the dimensions of technology and the emergence of the knowledge economy. This book presents the vision and a plan of action to propel India into an orbit of prosperity by the end of the next decade.

Five core sectors that have been deliberated upon in this book cover agriculture, education and healthcare, infrastructure including power, information and communication technologies and strategic sectors including defence, nuclear and space technologies which have been identified with an integrated nationwide approach for growth.

The beauty of India can be seen in the deserts, mountains, seashores, forests and in the fields. India has a rich civilization, heritage, resource, talented workforce and above all there is potential due to the emergence of knowledge society. Still 26 per cent of our population is below the poverty line, and illiteracy and largescale unemployment persists. While it is imperative to address these problems, it is also necessary to increase the economic growth. This can be achieved by an effective management of resources and manpower – our core competencies.

Dr Kalam, a technocrat of international repute has demonstrated India's technological strengths in the areas of defence, aerospace, Information and Communication Technologies and the need for linking the academics, Industry and research laboratories to fully leverage these vital engines of growth. There were several instances where India was denied technical inputs by the developed world. Indian scientists and engineers took this upon themselves as a challenge and developed world class solutions indigenously. Technology denied proved being technology gained.

There are separate chapters devoted to the focus areas with excellent case studies from his experience as a scientist.The Interactions with students and youth from all parts of the country and the series of lectures given to the engineering students of Anna University, and students of other universities, colleges and schools, resulted in evolving this book. Hence, the book is dedicated to the youth and the student community of India. In his earlier book, "India 2020-A vision for the new millennium", written in 1998 with Shri Y S Rajan, the book discussed the Technology Vision 2020 by TIFAC, which was evolved with the help of 500 experts. In the last few years, there have been significant developments and technological revolutions. Now a consensus has emerged in all the sections of the society, particularly among the youth and children, to live in Developed India and take appropriate actions. Even the Indian families living abroad have expressed their desire to participate in missions to transform India into a developed nation. In view of the above, a need has been felt to write this book. This book goes into the specific details pertaining to the impact of technology on society, and the missions leading to a developed India by 2020.

In recent years, technology has come to play a dominant role in improving the quality of life. Technology is the engine capable of driving a nation towards growth and prosperity, and giving it the necessary competitive edge in the comity of nations. Technology, thus, has an important role to play in transforming India into a developed country.

Today, India has core competence in system design, system engineering, system integration and system management of launch vehicles, missiles and aircraft, and capabilities for developing critical technologies. This book brings out these aspects in an integrated manner through two important case studies on the design of a launch vehicle and a guided missile. Our aim is to convey that just like science, we have to make technology a universal system, decoupling geo-political policies. These case studies pertain to our experiences of working at ISRO and DRDO, and with great technology visionaries such as Dr. Vikram Sarabhai and Prof. Satish Dhawan.

The aspiration of young minds to make the nation great is evident. It is important to recognise that India has a population of 700 million young minds. This is a large force which needs to be harnessed constructively towards a singular mission of making India a developed country. Like the young, every citizen of India would like to live in a happy, prosperous, peaceful and safe India.

NABCB secures more International Equivalences

The National Accreditation Board for Certification Bodies (NABCB), the national accreditation body for accreditation of certification and inspection bodies, and a constituent board of the Quality Council of India (QCI), the apex body on accreditation and quality promotion in India, has signed the Multilateral Mutual Recognition Arrangement (MLAs) of the International Accreditation Forum (IAF) for its accreditation programmes on Food Safety Management Systems (FSMS) certification as per international standards ISO 17021 and ISO 22003, as well as on Information Security Management Systems (ISMS) certification as per the international standard ISO/IEC27001,on November 5, 2015 at Milan, Italy in the presence of other IAF MLA Signatories. Anil Jauhri, CEO, NABCB received the IAF MLA certificate from Mr. Randy Dougherty, Chair of IAF in a glittering ceremony.

This confers worldwide equivalence to NABCB's accreditation programmes in these two areas. NABCB is one of the three Accreditation Bodies in ISMS and one of 11 Accreditation Bodies in FSMS worldwide to sign the IAF MLAs.

This means that any industry or organization, certified to international standards, ISO 22000 for FSMS and ISO 27001 for ISMS, by a certification body accredited by NABCB in India, can claim international equivalence. This would facilitate acceptance of Indian goods and services in the world market. Incidentally no accreditation body from Europe or North/South America has yet secured this distinction.

IAF is the global association of Accreditation Bodies and other bodies interested in conformity assessment in the fields of management systems, products, services, personnel and other similar programmes of conformity assessment. Its primary function is to develop a single worldwide programme of conformity assessment which reduces risk for business and its customers by assuring them that accredited certificates may be relied upon. Accreditation assures users of the competence and impartiality of the body accredited.

NABCB has already secured international equivalences for its accreditation programmes for ISO 9001 certification bodies in 2002, ISO 14001 certification bodies in 2007, Product certification bodies based on ISO 17065 in 2013, Inspection Bodies based on ISO 17020 also in 2013 and GlobalGAP certification bodies in 2014.

Accreditation has become an essential tool for getting international acceptance of certification, inspection and testing done in India and it is referenced in many bilateral Free Trade Agreements such as the India–Singapore Comprehensive Economic Cooperation Agreement in which NABCB accreditation is a requirement for certification of electrical/electronic and telecom products. Thus, accreditation eliminates technical barriers to trade and facilitates export of Indian products in world market.

NABCB has currently accredited 14 Certification Bodies and has seven applicants for FSMS and has currently accredited three Certification Bodies and has one applicantfor ISMS. Entities certified for FSMS and ISMS by NABCB accredited certification bodies will gain international recognition and acceptance.

Anil Jauhri, CEO NABCB receiving IAF MLA Certificate from Mr. Randy Dougherty, Chair IAF

Quality is the business of doing business

Quality is a complex and broad concept and before searching precise measures of product quality, there should be a clarity on what exactly quality means as an in-depth knowledge about the multiple dimensions of quality is a must to achieve the desired levels of quality. This is important because there is a great possibility that quality may have different meanings in different industries for different segments. There are several different perspectives on quality, and a number of diverse critical dimensions. Its eight dimensions from performance to features, reliability, conformance, durability, serviceability, aesthetics and perceived quality are the key elements that should be kept in mind while considering product quality.
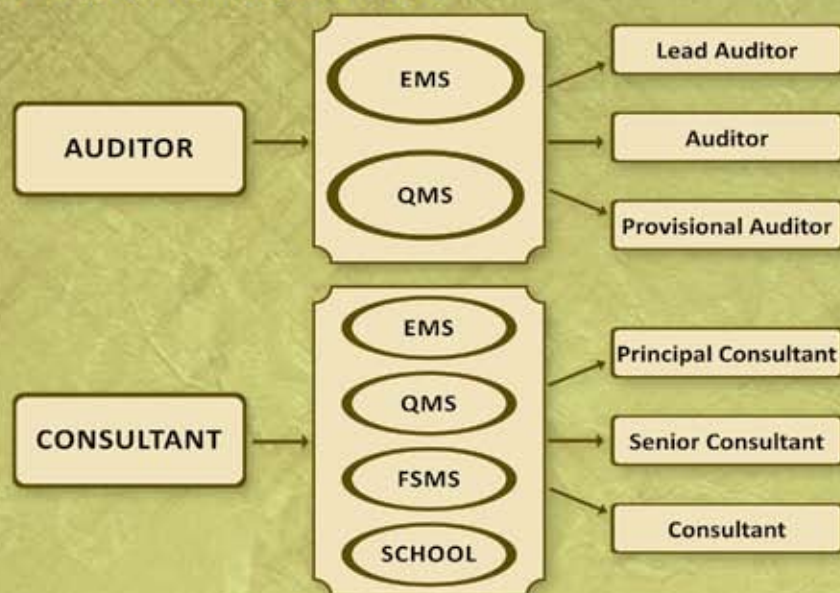
These distinctions are more than just theoretical niceties as they are the key to using quality as a competitive weapon. Managers must learn to think carefully about how their approach to quality changes as a product moves from design to market, and must devise ways to cultivate these multiple perspectives. Attention must be focused on the separate dimensions of quality; markets must be closely examined for any untapped quality niches, and the organisation must be tailored to support the desired focus. Once these approaches have been adopted, cost savings, market share gains, and profitability improvements can hardly be far behind.

The importance of quality in every walk of life cannot be overemphasised in this global economy. During our daily life we presume so many things: milk is not adulterated, the food we consume does not contain harmful substances, vegetables do not have pesticides and herbicides, the transportation is safe and reliable, we can occupy the seat as indicated in the railway reservation chart and a flight on a particular day and time would take off as scheduled, our money is safe in the banks. We trust so much, investment in a sound mutual fund is not risky but will give attractive returns, the refrigerator which we bought by investing a hefty amount would produce ice and keep the stuff inside cold at all times without consuming too much power or making too much noise.

Quality is the business of doing business and the race is on to capture a bigger slice of the market pie with competition hotting up from domestic as well as foreign business. More and more industries are re-orienting their focus on customers' needs to make them satisfied and keep them as their loyal customers. Quality is the bandwagon as we are into the 21st century. Customers expect a better deal in the coming years. Quality is thus the enchanted mantra for salvation for both the customers and businesses. It should be clearly understood that quality is an attitude of mind and a way of life where "excellence is a journey, not a destination." Product quality is rapidly becoming an important competitive issue.

NBQP operates auditor/consultant registration schemes in line with international norms, who can be engaged for improving the performance of MSME Sectors. The details of the criteria are available on http://nbqp.qci.org.in/registration.php

AUDITOR
- EMS
- QMS
  - Lead Auditor
  - Auditor
  - Provisional Auditor

CONSULTANT
- EMS
- QMS
- FSMS
- SCHOOL
  - Principal Consultant
  - Senior Consultant
  - Consultant

BENEFITS

1. The register of registered Consultants/Auditors will be hosted on the QCI website.

2. Consultants/Auditors will be given special discount for Participating in the National Quality Conclave, Seminars/Programmes and periodic events organised by QCI.

3. Consultants/Auditors can contribute Articles/Commercials Advertisement in Quality India Magazine.

4. Consultants/Auditors will be given a Registration Certificate.

QCI / MEMBERSHIP SCHEME

QCI has launched a "Professional Membership Scheme" for providing a platform for all those who have a passion to become a part of the National Quality Movement. The scheme is open for all professionals - Pan India. There is also a separate category for organisations to join the scheme. The details of the scheme are available on the QCI website http://qcin.org/nbqp/PMS/.

Membership Type

Presently two types of membership will be operated; namely, individual and organisation membership. There will be different categories of membership under each type with different fee structure which is available at http://qcin.org/nbqp/PMS/feestructure.php

MEMBERSHIP TYPE	CATEGORY	ENTITLEMENT TO FREE REGISTRATION	BENEFITS
Organisational (Corporate)	Corporate Small (Turnover up 10 Crores)	5	1. Members will be entitled to receive a copy of "QUALITY INDIA "magazine.
	Corporate Medium (Turnover up 10 – 100 Crores)	8	
	Corporate Large (Turnover above 100 Crores)	10	2. Members will be given special discount for Participating in the National Quality. Conclave, Seminars/Programmes and periodic events organised by QCI.
Hospital	Small Hospital (up to 50 Beds)	5	
	Medium Hospital (50 – 200 Beds)	8	3. Member can quote their QCI Membership numbers in their Business Cards.
	Big Hospital (above 200 Beds)	10	
Education	School	2	4. Member will have Networking Opportunities with Quality Professionals across all sectors.
	College	2	
	Higher / Professional Institute	5	
NGO's	All	1	5. Members can contribute Articles/Commercials Advertisement in Quality India Magazine.
Individual	Full member (Quality Practitioner with 5 years' experience)		6. Members will be given a Membership Card and Membership Certificate (In case of Corporate).
	Life Member (Quality practitioner with 5 years' experience)		

Everyone Can Improve Quality

Thousands of Organisations in more than 100 countries
Trust & Use Softwares by Minitab, for their Quality Initiatives.

Minitab® 17
Confidently Analyze your Data

Quality Companion
Execute Improvement Projects Faster

Devize™
Perform Monte Carlo Simulations Easily

Quality Trainer
Learn Statistical Concepts Online