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Government of India



सूक्ष्म,लघु और मध्यम उद्यम मंत्रालय, भारत सरकार MINISTRY OF MICRO, SMALL & MEDIUM ENTERPRISES GOVERNMENT OF INDIA





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Recognising Organizations for Best Practices in Quality Excellence and sharing their success stories

Quality Council of India invites applications from Organisations, Entities, NGOs, Gol Departments etc., to showcase their unique/out-of-the-box Projects

About the Award

The QCI-D.L. Shah Quality Awards Scheme was launched in 2007 to promote quality excellence and is today recognised as one of the most coveted Awards at the National level. The Awards recognise successful projects of establishments within India that have ensured continuous improvement in three aspects, namely;

Operations and processes

Products and/or services

3 Customers'/Stakeholders' satisfaction

Eligibility

This Award is open to any type of Establishment-

- · Any Govt. Enterprise · PSU · MSME · NGO
- Manufacturing including Oil and Gas, Pharma, Food, Textiles etc.
- · Services like Infrastructure (Road, Transport etc.), Financial Service (Banking, Insurance etc.), Hospitality etc.
- · Healthcare · Education
- · Any others (Not included above)



Selection Process

Online Application Stage 1:

Preliminary Screening: -Stage 2: **Document Assessment**

Project Presentation Stage 3: at QCI office

Site Verification for Stage 4: project implementation

Stage 5: Final Selection by Jury

For Registration and other details log on to http://qcin.org/nbqp/dsa/2016/

Online Application Deadline 25th April 2017

For any queries qcidls.nbqp@qcin.org/shruti.nbqp@qcin.org © 011-23379321, 23378217, 23378056 Extn. - 20 8800891834



Dr Ravi P Singh Secretary General Quality Council of India (QCI)

Editorial

e are proud to announce that Quality Council of India (QCI) completed 20 years of its existence on January 21, 2017. We had the blessings of many stalwarts in our journey since inception and we were fortunate to have few of them with us on this day. The observations and vision for the future was laid out during the Foundation Day celebrations and QCI honoured many of its officers and staff who have been with us for more than 10 years. It is with the collective efforts of all these young men and women who have worked tirelessly to bring laurels to the organization during the past 20 years.

Our aim and efforts to create an integrated quality ecosystem in the country also fructified with the amalgamation of National Accreditation Board for Testing and Calibration Laboratories (NABL) in the beginning of the year. NABL, which was earlier with the Department of Science and Technology, GoI, was the only accreditation body in the country which was not under the overall ambit of QCI. With its inclusion, there is a more concerted effort to improve quality of various products and processes, which augurs well for the holistic development of QCI and quality.

The new financial year brings many more areas where QCI has started working. These new areas of intervention will pave a way to improve services which impact larger cross section of people. Teacher education, primary healthcare, energy sector, skill development etc. are the new emerging areas where QCI has started working. Our team is going around the country creating awareness about Zero Defect Zero Effect model for MSMEs and we have covered length and breadth of the country including areas which are industrially backward. We shall soon be starting the assessment of MSMEs in the ZED maturity matrix.

There is so much of optimism in the air around quality in India. We at QCI feel it every day by the enormous buzz around the office and the variety of work that we have been entrusted with. With every growing organization, comes varied challenges of governance, of scalability, of speed, of ethics in assessment and quality of results. We have tried extremely hard to maintain a strict discipline in every aspect of quality and zero tolerance towards any outliers which may develop into the system. We are proud that despite all the challenges and the extent of our engagement in many projects, we have been able to maintain a robust system and have learnt to take swift actions whenever a few compromises are reported on ground.

Quality in every sphere of life is a people movement. We invite cooperation, collaboration and constructive criticism to improve our efforts. We shall grow more, in size and in our efforts to bring about a discernible change in how people perceive quality. This issue is a reflection of our efforts and a commitment to our intent. I hope you will encourage us with your comments!

CONTENTS

	3	Editorial	30	NBQP - Updates	50	Swachh Survekshan 2017
	6	The ZED Launch	32	NABET - Updates	52	Swachb Bharat Mission
1	0	Engagement of BMOs with Government Today	34	Foundation Day Celebration	54	Smart NSDC Skills Project
1	2	Changing definition of MSMEs	36	The Sustainable Growth Impetus for MSMEs in India	56	NABET to accredit SAI Training Centres
1	4	ISO 29990:2010 standard for Learning	39	India National Platform on Private Sustainability	57	Windows of Soul
1	6	SIDBI's Scheme of Assistances : 4E, SMILE & Accreditation of BMOs	40	Panchakarma Clinic Accreditation Programs	58	Building Quality Culture : Prerequisite to
1	8	NABL - Updates	42	Studies on Atmospheric Aerosols and Dust Particles	59	Quality Inputs in School Education
2	4	NABH - Updates	39	Accredited BMOs/Industry Associations by NABET	60	Basic Factors and Scorecard for Measurement of the
2	6	NABCB - Updates	46	World Quality Month Celebration	64	Implementation of Good Agricultural Practices

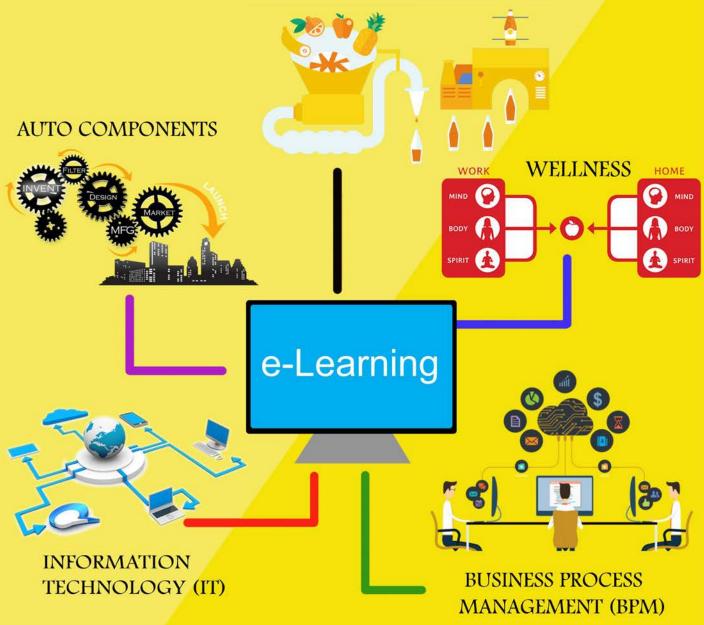


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The ZED



The Zero Defect Zero Effect (ZED) Scheme was launched by Hon'ble Prime Minister Shri Narendra Modi in the presence of Shri V. P. Singh Badnaur (H.E. the Governor of Punjab), Shri Parkash Singh Badal (Hon'ble Chief Minister of Punjab), Shri Kalraj Mishra (Hon'ble Union Minister of MSME), Shri Giriraj Singh (Hon'ble Minister of State-MSME), Shri Haribhai P. Chaudhary (Hon'ble Minister of State-MSME), Shri Vijay Sampla (Hon'ble Minister of State, SJ&E), Shri Madan Mohan Mittal (Hon'ble Minister of Industries, Punjab), Shri Piyush Goyal (Hon'ble Minister of State, I/C, for Power, Coal and New & Renewable Energy) and other dignitaries on the dais which included Shri K. K. Jalan (Secretary, MSME), Shri V. K. Saxena (Chairman, Khadi & Village Industries Commission), Shri C. P Radhakrishnan (Chairman, Coir Board), Shri Milind Kamble (Chairman, Dalit Indian Chamber of Commerce & Industry), Shri Adil Zainulbhai (Chairman, Quality Council of India).

ED is a model where concept of quality has a holistic change from a tool for compliance to a source of competitiveness. Operationally it is meant to evolve

Launch

आज यहां एक और प्रकल का भी प्रारंभ हुआ है ZED. 'Zero effect Zero defect'. आप सब इस बात को भली-भांति जानते हैं कि अब सामान्य व्यक्ति खरीददार भी quality compromise करने को तैयार नहीं है। पहले हम भारत के ही market को देखते थे और सोचते थे कि ये चीजें हैं वो शहरी इलाकों में जरा पढ-लिखे लोगों के बीच में बिक जाएगी, ये थोड़ी जरा finishing ठीक नहीं है। ऐसा करेंगे उसको Tier II, Tier III शहरों में बेचेंगे और ये जो जरा और मामूली दिखती है उसको जरा गांव में जाएंगे तो बिक जाएगी। ज्यादातर हम लोगों की सोच भारत के ही market को ध्यान में रखकर के और आखिर ये इतना बड़ा देश है तो कोई product पड़ी तो रहती नहीं है, कोई garment बनाएगा, top quality का होगा तो बड़े शहर में जाएगा और थोड़ी हल्की quality का बन गया तो चलो भई गांव के बाजार में रख देंगे चला जाएगा। अब वो वक्त नहीं है। सोच बदल रही है। लेकिन उससे बड़ी बात है कि क्या हिन्दुस्तान का लघु उद्योगकार, क्या हिन्दुस्तान का सूक्ष्म उद्योगकार ये सिर्फ भारत के market को ध्यान में रखकर ही अपना कारोबार चलाएगा क्या। अगर देश की उत्तम सेवा करनी है तो हम सबका लक्ष्य रहना चाहिए कि हम Quality control में global standard को अपनाएंगे और दुनिया के market में हम अपना पैर जमाने के लिए भारत की पहचान बनाने के लिए प्रयास करेंगे।

from a total dependency on inspection of the final product to correct defect, to a proactive process of enablers of quality like quality planning, product and process designing, optimum processes, efficient resource management, effective outsources activities and breakthrough outcomes. All along with quality of products and services equal emphasis is on the elimination of impacts on environment through adequate planning at product and process design, pre-production (startup activities), production and maintenance activities, post production (disposal after use) and outcome of environment performance. The net result is sustainable development.

Developed to provide a fillip to the Make in India campaign, ZED is expected to act as a catalyst to bring about a socio-economic transformation in the Indian industry.

Our Hon'ble Prime Minister has been a guiding force to the process of culture creation amongst entrepreneurs of this vision of making India a manufacturing hub, the Ministry of Micro, Small & Medium Enterprise (MSME) has instituted a subsidy plan called "Financial Support to MSME in ZED Certification Scheme" and by making full use of this opportunity, the MSMEs will embark on a journey to become globally competitive and work towards becoming the growth engines for the economy. The Quality Council of India (QCI) has been the National Monitoring and Implementation Unit (NMIU) for this scheme.





Shri Kalraj Mishra, Union Minister, Micro, Small & Medium Enterprises (MSME), in his address, expressed his gratitude to the Hon'ble Prime Minister for taking out time to chair the ceremony and briefed the audience about the events of the day and the schemes scheduled to be launched by the Hon'ble Prime Minister, and its expected benefits to the MSMEs of India.

on'ble Prime Minister stressed on the importance of quality improvement and compliance and said nowadays consumers are not willing to compromise on quality. Stating the example of Japan's global quality standards even after World War II, he urged Indians manufactures to make products without any defects.

क्या हिन्दुस्तान की पहचान नहीं बन सकती दुनिया के किसी भी बाजार में, जैसे ही वो पढ़े Make in India वो आंख बंद करके सोचेगा कि ये योग्य होगा, अच्छा होगा, किफायत भाव से बना होगा और वो लेने को तैयार हो जाए। ये dream लेकर के हमें चलना है और इस dream को पूरा करना है तो Zero defect उसकी पहली शर्त होगी।manufacturing करने वाले के दिमाग में ये उदहारण रहना चाहिए कि Zero defect होगा तब जाकर के मैं दुनिया के अंदर अपनी ताकत पहुंचा पाऊंगा और इसलिए standardization, quality control और उसी से branding पैदा होता है।

India can make a foothold in the world with the means of standardization, quality control and branding. Indians have the capability of completing the projects in the most cost effective and desirable manner, so why not extend the competence and become the global leader in every aspect. It does not matter if the product is small, it may carry the utmost importance in the development of space products, futuristic component or any similar type.

The ZED Scheme will provide a huge impetus to the Indian MSME sector and would thus boost the Make in India campaign. The PM also urged ~10 lakh MSMEs to participate in the ZED Certification Scheme.

मेरा उद्योगकारों को निमंत्रण है कि इस 'Zero defect Zero effect' movement में कम से कम 10 लाख उद्योग उस competition में आए आगे। 50 parameter तय किए हैं। उस 50 parameter के लिए अपने आप को सज्ज करे। कुछ किमयां हैं तो ठीक करे। आप देखिए Global market के लिए हमारे product जगह बनाना शुरू कर देंगे और भारत सरकार का यह प्रयास, यह सर्टिफिकेशन जो है वो दुनिया में काम आने वाला है। उस दिशा में एक महत्वपूर्ण initiative आज यहां किया गया है।

Moreover, Indian products should be manufactured in a manner so that environment has Zero Effect, Zero negative effect on the future of the earth, humans and the development of the same.

उस पर हम बल दे और डंके की चोट पर दुनिया को हम कहे कि हम वो चीज लेकर के विश्व में आए है जो मानव जात के भाग्य को भी सुरक्षित रखती है, भविष्य को भी सुरक्षित रखती है और आपकी आवश्यकताओं की भी उत्तम से उत्तम पूर्ति कर सकती है। इसलिए 'Zero defect, Zero effect', इस मंत्र को हम आगे बढ़ाना चाहते हैं।

ZED explanatory video was played at the end of the launch to showcase the philosophy & intent behind the Zero Defect Zero Defect concept. Audience appreciated and applauded the first-in-hand initiative by the Government of India to propel the manufacturing sector.





The Hon'ble Prime
Minister also visited an
exhibition highlighting
the role & support of the
Ministry to the MSMEs
of India and portraying
the contribution of
MSMEs to nation
building as a catalyst.

Shri Giriraj Singh, Hon'ble Minister of State, MSME, expressed his gratitude to the Hon'ble Prime Minister, dignitaries and the audience for taking out time and making the event a success. He thanked and congratulated all the people involved in making this event a success.













Ramesh Abhishek, Secretary DIPP

ngagement of BMOs with overnment Todav

am familiar with problems of MSMEs as I come from a family of entrepreneurs. We know the jobs that are created by the MSMEs sector in India but the challenge is to see that their contribution to the MSME is commensurate with the jobs that we create in the country. In China, almost 70-80% of the jobs & almost the same amount of value is created; however, in our country the MSMEs contribute the same amount of jobs but the value is only 20%. For the government, it is very important that more and more jobs are created. For that, 'Make in India' programme was launched by the Prime Minister of India two and half years back. For 'Make in India,' the government has taken series of steps in creating the right environment through tax relaxation (policies), infrastructure development, ease of doing business, or skill development; they are all critical areas for 21 sectors action plans. Recently, we have brought out progress reports of 18 of these sectors all under Make in India' website. As to what exactly has happened in the last 2 years, a lot of work has been done and lot of work is under progress. Now, we are looking at refining 'Make in India' programme, and emphasis is to see that we focus on some champion sectors as has been identified by a thorough and detailed study of CII and we are going to focus on those sectors where we have some inherent advantages which have a lot of potential for job creation. Textile is a priority sector, leather footwear sector, gems & jewellery are all focus areas for "Make in India 2.0". Of course, industry as a whole has been extremely difficult, for getting common access services is a humungous task. For small businesses, accessibility has been even more difficult in 2.5 yrs. The Prime Minister has been very keen to create a very good business climate in the country. Mindsets of people who are providing services must change. We have to continuously improve the ease of doing business. The good thing is not only the Central government, but the state governments, Municipal Corporations, regulators are all working together in various degrees. Not all states,

ministries, regulators are as proactive, but we can see that at least 15-16 states are working very hard. The impact of their work is very visible on the ground; however, much more needs to be done. There are online systems now, deemed approvals can be done. People are being asked to approach individuals less and less reducing physical touch points and applying, registering, paying taxes, getting approvals is being made online. Less you work with people in the government, the better it is, we know that. A number of procedures have been cut down. Number of days it takes to get approvals and the cost of doing business has been cut down. Ease of doing business ranking is the only experiment being done in the world, where all the states in the country like ours are ranked in public domain deriving business reform action plan since July last year. A Business Reform Action Plan by DIPP for all the states is being ranked under 340 parameters by October 2017.

In 12 states, which have got more than 90% score, this year we are working on different set of parameters, many of them will be same besides adding new ones, since MSMEs get affected by all these procedural delays and harassment much more than others. This really helps them. Half of the grades would now be given based out of public feedback. Users would be asked on impact of reforms (a key feedback). If a state claims that certain approvals are given in 5-7 days, feedback is to be taken from actual users, if it is true. All states have agreed on it.

On start-ups, PM is extremely focussed to create a good ecosystem to promote start-up growth in the country. 19-point action plan has been drawn and a lot needs to be done. We are going far beyond.

A fund of funds has been created of Rs. 500 cr with SIDBI and a lot needs to be done in implementing it on investment funds for funding start-ups. Changes in guidelines have been done for fast tracking disbursement. We



are also creating a Trade Guarantee Scheme of Rs. 2000 cr where SIDBI will be creating for start-ups who need this guarantee. Banks are flush with funds after demonetisation. Banks would be able to step up lending the MSMEs at much lesser interest rates. Cost of electricity in the industrial sector is very high due to cross subsidisation. Flagging it is an issue for ease of doing business, which has to be resolved. Industry should not be made to pay for all the subsidies and incentives being given to other sectors.

Further, preferential market access for value addition is being done in our country. In electronics & telecom products list where it is mandated for public procurement, 30% of value addition should be done in India, we have proposed that it should be mandated for all products, that at least 50 % of value addition should be done in India which are bought by the Government. In USA, there is a "Buy America Act" made in 1933 which mandates that 50% of value addition should be done for Green America, 6% price preference to domestically manufactured goods, 12% price preference for small business, 15% price preference for different products. Time has come for working on those lines in India which will help the MSME sector. Criteria for prior experience and turnover for MSME sector has been removed. Units manufactured in India are not able to supply to major buyers such as Railways and others as they do not have prior experience.

Even MSMEs who have set up manufacturing units in India are required to import rather than supply from their Indian plants because they do not have prior experience in India. Normally we are removing this. This will promote manufacturing in our country and MSMEs will benefit in a major way from this policy change. Upgradation of technologies is very critical for improving our competitiveness. A whole lot of MSMEs are doing world class manufacturing of auto components and we are one of the best in the world. More effort from the government is required to acquire better technologies such as technology acquisition funds created for MSME Industry 4.0 and emphasis on smart manufacturing.

We are working on a policy. We will be consulting all stakeholders including MSMEs for suggesting policy by the government in the 4th wave of industrialisation for adopting better technology tools, such as IOT, Robotics, AI, additive printing and so on, where MSMEs will have a big advantage.

People are becoming nimble and going to the places where the demand is and they are setting up small scale, smart and technologically advanced manufacturing facilities. In this new era that is going to come in the next 10-20 yrs, actually MSMEs will have a big advantage in terms of scale, so this idea of large scale economics of scale etc. is going to go away after some time. With 'additive printing" coming up, you don't need to set up large manufacturing plants. Those are the opportunities for MSMEs in Industry 4.0.

Prime Minister is very keen that jobs in the country should be created and MSMEs are critical to create the jobs. Please work with us and help us on how we can do this better, whether definition of MSME has to change in this country. As we all know investment limits is the criteria for defining MSMEs, while in many parts of the world it is defined as number of employees besides capital investment and turnover.

So what is best for India has to be worked out. We also know that when we want to give incentives, support MSME in marketing or otherwise, there will be WTO issues, but if the definition of MSME is flexible, it can be different for different sectors. Then whatever subsidy or preferential market access is given to MSME, it is WTO compliant. So MSME sector/ associations should seriously think about it. What could be a flexible definition of MSMEs in various sectors that could help the sector and also benefit the supports given by the government to WTO compliant organisation.

On clusters, we have national manufacturing zones, industrial corridors, textile & leather parks, electronics parks. We have decided to prepare a national master plan for manufacturing clusters and zones. We have various manufacturing clusters and zones in various parts of the country. Much coordination amongst ministries and states is needed for synergisation of efforts. Some states decide to set up some cluster somewhere; it costs a fortune to provide the external infrastructure. Wherein if this is synchronised, those clusters can be used better, cost of providing external infrastructure would be optimised, incentive structure of all the clusters should be harmonised.

We should not have perverse incentive structure that motivates industry to relocate from one place to another, whether SEZ or other clusters. This exercise has also started which would help us. FDI policy has led to huge amount of Foreign Direct Investment in the country, which is creating opportunities in the manufacturing sector and services sector. Name of the game is being competitive. The government has to play its role by reducing the cost of doing business by reducing cost of capital, making labour laws more flexible, and providing proper market access.

Continuous engagement with industry and association can be a very rewarding experience for us. While large enterprises do not need as much of facilitation through BMO, but MSMEs do.

BMOs play a very important role in articulating the issues, problems, challenges and solutions of the small scale sectors. I encourage you to engage with the government more and more as the government now is very flexible, pro-business and likes to create jobs and improve business climate in the country. So, the engagement with the government would be far more fruitful today than it has ever been.

Inputs by Dr. Indrajit Bhattacharya, Director, NABET

Changing definition of MSMEs



K.K Jalan, Secretary, MoMSME

he first time in any Union Budget, this time, MSMEs were segregated for giving 5% benefit in corporate tax and that benefit according to Finance Minister is around Rs. 7200 crores for the MSMEs per annum. The second announcement coming ahead of Budget 2017 was a Credit Guarantee Enhancement from Rs 1 crore to 2 crores. For the first time again it was extended for the loans for the NBFC (Non-Banking Finance Commission).

SIDBI manages this trust fund, although the orders have been issued by the government, implementation has to be seen by MSME association. Let us see why SMEs are important. Let me not segregate the industrial production as such a lot of industrial production will always happen in the Small Scale sector. It is not economically viable to produce an entire car in one factory. Large parts of car manufacturing would go to small sector due to economics of scale. The SMEs are necessary due to the cost structure & production.

Small enterprise is going to exist. The MSMEs can be divided into 3 types

- Due to the cost of production. e.g. Maruti making car in Gurgaon, large parts of the car has to be manufactured outside the Maruti factory. Those MSMEs will come and they are helping Maruti to make the car (the ancillary industry).
- MSMEs coming due to population e.g. manufacturing of household b)
- Knowledge based enterprises relating to MSMEs Industry 4.0.

We are a leader industry but perhaps not able to make best use of the leadership. We are becoming product developer, perhaps not able to earn from branding, we may produce software worth million dollars, but total GDP of India might be getting only USD 1 lac, otherwise valued at million dollars. Various associations must think about various types of SMEs & look how Government needs to intervene on various types of SMEs. During 1950s-60s industrial production/foreign exchange was a priority.

Today, employment is most important and SME creation, Employment SME enterprise. We are carefully looking at all these things in the ministry.

For the first time, hopefully we will be able to change the definition of MSMEs. The definition of MSMEs is thought to be based on turnover, employment and the capital deployed. We are also thinking that employment be an important part whenever Government is giving incentive for creation of MSME. We are looking at definition of the enterprise also. The world over it is department of businesses of small enterprises. It does not distinguish between manufacturing, services & trading sector. In India, ministry has come out of the SSI, somehow manufacturing became an important thing and we did not change the industry focus because of enterprise model. Now we would like to change to the enterprise model. We brought into an Act in 2006 but we did not change the focus. We must have a directorate of small business which really helps small business. Major challenges are Technology Credit Linked Subsidy Scheme (CLSS), enhancing credit; PM Employment Guarantee Program (PMEGP) for small enterprises, Capacity Building & Skill Development of employees of SMEs. How effective these schemes can be made, the MSME associations have an important role to play.

The MSMEs feedbacks are very very important. We have come with MSME data bank, the first online census of the MSME. I am sorry to state that despite being made compulsory by the ministry, most of the MSMEs are not filling the data which takes only 5 minutes. A data bank of 2 crores of MSMEs would strengthen the ministry to fight with finance ministry for their cause with the strength of the data.

Please make use of msmedatabank.in which gives an online census of MSME.

Inputs by Dr. Indrajit Bhattacharya, Director, NABET







Enhancing MSME's Competitiveness through Lean Manufacturing Tools & Techniques Ministry of MSME Scheme

Applications are invited from MSME Clusters (6 - 10 units) located within a contiguous area and manufacturing same/similar products or process for implementation of Lean Manufacturing Competitiveness Scheme.

National Accreditation Board for Education and Training (NABET) has been designated as a National Monitoring and Implementation Unit (NMIU) by Ministry of MSME for Lean Manufacturing Competitiveness Scheme exclusively for Micro, Small and Medium Enterprises.

NABET is successfully operating 200+ clusters in various industry sectors like Textile, Automobile, Agriculture, Pharma, Packaging, Iron and Steel, Foundry...etc... all over the country. Some of the successfully completed Clusters are:

- · Okhla Garment and Textile Cluster, Delhi
- · Kundli Stainless Steel Cluster, Haryana
- Packaging cluster Haridwar, Uttrakhand
- · KSS Abhishek Auto Cluster-Tier-1, Haryana
- ILPA Infrastructure Development Foundation, West Bengal...etc....

Lean Manufacturing ensures

- Quality performance, fewer defects and rework (in house and at customer end)
- Fewer Machine and Process Breakdowns
- · Lower levels of Inventory
- · Improved delivery performance
- · Higher efficiencies, more output per man hour.

Salient Features of Scheme

- Clusters are being formed comprising of 6 -10 MSMEs
- Lean consultants implements various Lean Tools and Techniques depending on the need and requirement of Individual units for a period of 18 months on the shop-floor.
- 80% subsidy is being provided by Ministry of Micro, Small and Medium Enterprises (MSME) for implementation of the scheme.

ISO 29990:2010 standard for Learning **Service Providers (LSP)**





Vipin Sahni CEO, NABET-QCI

C S Sharma Dy. Director NABET-QCI

ndia is expected to grow at an approximate rate of 8% for the next 10 years and is progressively moving towards becoming a "Knowledge Economy". It is a country today with approx. 65% of its youth in the working age group with an average age of 29 years. Population in the working-age years is set to expand massively in India. Between 2010 and 2030, World Bank estimates suggest, the population in the 15-59 age group will increase by more than 200 million in India while it is expected to decline in many developed countries as well as in China.

India is going to witness a clear shift of its workforce away from agriculture. This shift will be due to "push" from a low value-added agricultural returns besides "pull" arising new opportunities in other sectors. Also there has been a steady growth in the enrolment in educational institutions especially among females besides rural areas. Along with the growth of demand for quality education and skills, workers joining the labour force from rural India are having greater expectations of gainful employment.

Also if we consider that India is among the key Emerging Market (EM) of the world and many international companies are looking at establishing or expanding their bases in India. The recent news on Apple considering India as its manufacturing base substantiates the world's focus on India. More than 20,000 lakh crores of investments have been committed by International and Domestic Investors because of the efforts of the current government.

To achieve the economic goals, we do need to focus on the demographic trends. It is for us to convert the demographic challenge into the demographic dividend. If ever there is a way to reap this demographic advantage, it has to be through skill development of the youth so that they add not only to their personal growth, but to the country's economic growth as well.

Hence there is need for a structured training modules and their quality assurance in line with international expectations. Market oriented training courses catering to the changes in the industry especially manufacturing industry are essential.

Recent development in education and training shows that share of market oriented learning services providers (LSP) in the educational market is growing. Tailored services (especially customized to company needs), individualization and personalized services appear as a general trend. In line with corporate requirements and beyond these, consideration of the learning needs at the individual level requires greater quality control in order to support and safeguard the life-long learning process. This leads to increased requirements on quality assurance (course design, competence of the trainers etc.) of these learning service providers.

Feeling the need for a standardised training in the global markets, ISO has developed and launched an international standard ISO 29990:2010-Learning services for non-formal education and training -- Basic requirements for service providers.

ISO 29990: 2010 standard, aims to improve the quality of offerings on the global market that has grown up around non-formal education and



training, such as vocational training, life-long learning and in-company training.

Non formal education means the organized educational activity other than the established and recognized formal systems of elementary, secondary or higher education. The organization or Institution that provides this is called a Learning Services Provider (LSP).

The objective of this International Standard is to provide a generic model for quality professional practice and performance, and a common reference for learning service providers (LSPs) and their clients in the design, development and delivery of non-formal education, training and development. This International Standard uses the term "learning services" rather than "training" in order to encourage a focus on the learner and the results of the process, and to emphasize the full range of options available for delivering learning services.

This Standard focuses on the competency of LSPs. It is intended to assist organizations and individuals to select an LSP who will meet the organization's needs and expectations for competency and capability development.

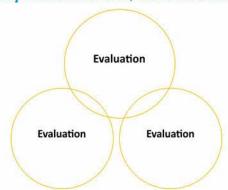
The adoption of ISO 29990 allows:

- Identify goals for quality and practical direction for the learning services;
- Maintain high satisfaction of the needs and expectations of the users of the training activities;



- · Monitor and improve the performance and skills of the staff involved in the delivery of training services;
- Ensure that the Learning Service Management System is established, monitored, evaluated and documented appropriately;
- Keep up to date teaching materials needed for learning;
- Raise awareness of the promotion of two-way communication between employees and collaborators, on items that can have a direct impact on them.

Key Elements of ISO / IEC 29990 are:



Certification criteria for LSP - ISO 29990:2010 - Core Requirements include :

Learning Services	Management of Learning Service Providers	
 ✓ Determine learning needs ✓ Design of the learning service ✓ Provision of learning service 	 ✓ General management requirements ✓ Strategy and business management review 	
 Monitor the delivery of learning service 	✓ Management Review✓ Preventive and corrective actions	
✓ Evaluation of Learning Services	 ✓ Financial management and risk management 	
	✓ Human resources management	
	✓ Communication Management	
	✓ Allocation of resources	
	✓ Internal audits	
	✓ Feedback from interested parties	

Benefits of the ISO 29990 Standard are enormous:

Benefits to the Learning Service providers	Benefits to the Learners	
 ✓ Excellence in Training Programs ✓ Enhancing Service quality ✓ Optimizing Business Processes and improving organization effectiveness ✓ Active participation of staff in processes of change and quality improvement ✓ Improved q uality of provisioning of learning services which leads to customer satisfaction and eventually more business ✓ International Benchmark 	 ✓ Credibility of LSP ✓ Assurance of Quality Transparency and Comparability of services ✓ Adequate resources, including trainers with suitable competence, infrastructure and learning environment 	

ISO 29990 standard can play a pivotal role in improving the quality assurance systems for thousands of learning service providers (LSP) spread across the country ,and may give a boost to Skill India programme by means of aligning the training practices in India to the international standards having a system approach to training.



SIDBI's Scheme of Assistances: 4E, SMILE & Accreditation of BMOs

SIDBI's Scheme of Assistances : 4E, SMILE & Accreditation of BMOs

Small Industries Development Bank of India (SIDBI) was set up on April 2, 1990 under an Act of Parliament (i.e. SIDBI Act 1989), as the apex financial Institution for the promotion, financing and development of Micro, Small & Medium Enterprises (MSMEs) in India. Financial support to MSMEs is provided by way of (a) refinance to eligible Primary Lending Institutions (PLIs), such as, banks, State Financial Corporation's (SFCs) for onward lending to MSMEs and (b) direct assistance in the niche areas like risk capital/ equity, sustainable finance, receivable financing, service sector financing, etc. A brief of three relevant schemes of SIDBI is given below:

End-to-End Energy Efficiency (4 E) Solutions Programme

SIDBI has launched 4E solutions Progamme. The 4E solution provides technical support to its MSME clients to improve their energy savings by availing the services of Technical Consultants at a reasonable cost with assurance on the quality of services.

A back-to-back financing product has also been developed with the support from World Bank project to provide loans for retrofit based energy efficiency projects to MSMEs at concessional interest rates and on softer terms. Under the 4E financing scheme, term loans upto 90% of the project cost are provided at concessional interest rate. The 4E solution is being implemented by SIDBI in association with India SME Technology Services Limited (ISTSL). During the current financial year, more than 100 MSMEs have been benefitted from the 4E solution

Capacity Building of Industry Associations

Industry associations or Business Membership organizations (BMOs) play a key role in promotion and development of MSMEs. To bring greater transparency in the functioning of BMOs, while ensuring standard of quality and performance, 'Accreditation of BMOs' needs to be encouraged to ensure minimum standards of governance, operations, quality and

performance amongst them. SIDBI has been proactively engaged with various BMOs and it has supported them for holistic development of the MSMEs under their jurisdiction.

SIDBI has launched a Scheme on pilot basis viz. "Capacity Building of Industry Associations" to provide assistance for strengthening Industry Associations. Considering the importance of BMOs and their likely impact on the larger number of associated MSMEs, there is a need felt about inclusion of Accreditation of "Business Membership Organisations (BMOs)" under the above Scheme. As such, scheme has been evolved to consider subsidizing the Accreditation Fee, through Quality Council of India (QCI), set up by Govt. of India, to the maximum extent of 50% of the amount charged.

Soft Loan Fund for Micro, Small & Medium Enterprises (SMILE)

SIDBI has formulated a Scheme for extending direct soft loan assistance to MSMEs. Mr Arun Jaitley, Hon'ble Finance Minister had launched the scheme 'SIDBI Make in India Soft Loan Fund for Micro, Small & Medium Enterprises (SMILE)' on 18.08.2015, with a corpus of Rs.10,000 crore. The scheme is to take forward this campaign to help MSMEs. The objective of SMILE is to provide soft loan, in the nature of quasi-equity and term loan on relatively soft terms to MSMEs to meet the required debt-equity ratio norm as also for pursuing opportunities for growth by existing MSMEs. The focus is on identified 25 sectors under 'Make in India' programme' with emphasis on financing smaller enterprises within the MSME sector. The scheme has built in higher concessional terms for the enterprises promoted by Scheduled Caste/ Scheduled Tribe/ Persons with Disabilities and women. With average ticket size of Rs. 75 lakh, the scheme is expected to benefit approximately 13,000 enterprises, with employment generation of nearly 2 lakh persons. It is hoped that SMILE would go a long way in improving the productivity and competitiveness of the MSMEs and help India in becoming a major and preferred destination of manufacturing hub.

Giving impetus to the 'Make in India' movement - SMILE



Introducing SMILE (SIDBI Make in India Soft Loan Fund for Micro Small & Medium Enterprises) to provide loan to MSMEs under 'Make in India' initiative to new as well as existing units on softer terms. Focus will be on all the identified 25 sectors or other as may be added in the 'Make in India' program. Deserving proposal from any other sector can also be considered on merits. Special benefits to enterprises promoted by Scheduled Caste (SC) / Schedule Tribe (ST) / Persons with Disabilities (PwD) / Women.



www.sidbi.in www.smallb.in



National Accreditation Board for Testing and Calibration Laboratories

NABL is a constituent board of Quality Council of India. NABL provides Government and Industry with a scheme of Laboratory accreditation which involves third-party assessment of their technical competence.

NABL amalgamates with QCI

Milestones:

- 2000 : NABL obtains Asia Pacific Laboratory Accreditation Cooperation (APLAC) and International Laboratory Accreditation Cooperation (ILAC) Mutual Recognition Arrangement (MRA) Signatory status for Testing and Calibration as per ISO/IEC 17025
- 2004: APLAC & ILAC MRA Signatory status renewed for Testing and Calibration
- 2008: APLAC & ILAC MRA signatory status renewed for Testing and Calibration as per ISO/IEC 17025 and extended for Medical Testing as per ISO 15189
- 2012: APLAC & ILAC MRA signatory status renewed for Testing, Calibration and Medical fields.
- 2016: APLAC & ILAC MRA signatory status renewed for Testing, Calibration and Medical fields and extended for Proficiency Testing Providers (PTP) & Reference Material Producers (RMP)

Accreditation Schemes:

TESTING ISO/IEC 17025:2005 CALIBRATION ISO/IEC 17025:2005

MEDICAL TESTING ISO 15189:2012

PTP ISO/IEC 17043:2010

RMP ISO 17034:2016

National Conclave for Laboratories



Dr. R. P. Singh delivered the inaugural address. The National Conclave was held on the sidelines of the IAF/ILAC joint annual meeting in New Delhi to take advantage of the presence of international experts like Mr. Peter Unger, Chair ILAC; Mr. Sean Mac Curtain, Secretary ISO/CASCO; Mr. Raj Nathan, Senior Vice President, IAS, USA; Dr. Dana Leaman, Chief NVLAP, USA who were attending the meeting.

he 5th National Conclave for Laboratories was conducted by NABL on 27th-28th October 2016 at Stein Auditorium. Indian Habitat Centre, New Delhi. The key themes of the conclave were:

- · Role of testing and calibration services in meeting demands of global supply chains
- Business growth sectors for laboratory services
- · Key global developments in Metrology, Testing, Calibration, Reference materials and PT programs
- · New technologies in testing and calibration contributing to global supply chain
- · Contribution of laboratory services in sustainable development
- Managing integrity and ethical management of laboratory services



APLAC Mutual Recognition **Arrangement (MRA)**



NABL team with APLAC Evaluators, July' 2016

he ILAC and APLAC MRA network facilitates the acceptance of test and calibration reports across national borders, thus contributing to the facilitation of trade and the free-trade goal of "tested once, accepted everywhere".

NABL is full member and Signatory to ILAC and APLAC MRA since the year 2000. NABL had undergone APLAC evaluation in the year 2016. A team of five evaluators (two from Japan, one each from The United States of America (USA), Malaysia, Thailand) evaluated the fields of Testing, Calibration, Medical, PTP & RMP. During the APLAC evaluation all the evaluators witnessed the assessments during various stages of accreditation process like initial assessment, surveillance and reassessments of CABs in various fields across India.

The APLAC MRA Council meeting held in Kuala Lumpur during December 2016 extended the MRA Signatory status in the existing fields of Testing, Calibration & Medical and included schemes of Proficiency Testing Providers (PTP) and Reference Material Producers (RMP) for a period of four years. NABL has always participated and actively involved in various activities of APLAC & ILAC. It also participates in General assembly/midterm meetings, workshops/trainings.

NABL in collaboration with Bharat Petroleum Corporation Limited (BPCL) organized APLAC Proficiency Testing program, APLAC PT T099 (Diesel Fuel) in which a total of 112 laboratories from 53 economies have participated.







Seminar on "Laboratory Accreditation -A perspective from Government, Regulators & Industries"

n the eve of 20th Foundation Day of Quality Council of India (QCI), NABL organized a seminar on "Laboratory Accreditation - A perspective from Government, Regulators and Industries" on 20 January 2017 at Hyatt Regency, New Delhi. In the current global scenario, accreditation has been acknowledged by the Government and Regulators in contributing towards their responsibilities and safeguarding the public interest. To achieve coherency in the overall quality ecosystem, NABL had put a step forward by providing a platform to regulators, stakeholders, industrialists, Government sector to have their participation and exchange of ideas towards accreditation being a pre-requisite element to avoid Technical Barriers to Trade (TBT).

Many of our stakeholders encompassing conformity assessment bodies, Industries, regulators, Government departments etc., participated in this seminar. The theme session involved key regulators operating in the country like Bureau of Energy Efficiency (BEE), Central Government Health Scheme (CGHS), Export Inspection Council (EIC) and National Physical Laboratory (NPL).

The speakers updated about the process of implementation of regulations in the country. The session had interactive discussion over the role of National Metrology Institute in Accreditation, EIC schemes for laboratory recognition, process for empanelment of medical laboratories in CGHS and BEE standard and labeling scheme for laboratories.

The seminar was inaugurated by Mr. Adel Zainulbhai, Chairman, QCI. He emphasized on delivering quality to the citizens of the country and to rise above the challenges. The inaugural session was also honored by Dr. R.P.Singh, Secretary General, QCI, Dr. G.N. Singh, Drugs Controller General of India, Mr. Anil Relia, CEO, NABL and Mr. N. Venkateswaran, Technical Operations Manager, NABL.



Release of NABL NEWSCAST

With an objective to reach out to regulators, stakeholders, laboratories etc., NABL released "NABL Newscast". It is a representative tool for NABL to help spread a word about its achievements and accomplishments. It is a great source of information wherein one can find all the latest updates on NABL's progress.



Global Associations



ith a view to cooperate with the International fraternity of accreditation services, NABL under the flagship of QCI has signed Memorandum of Understanding (MoU) with few countries namely:

- Federal Accreditation Services (Rus Accreditation), Russia
- National Centre of Accreditation (NCA), Republic of Kazakhastan
- The Belarusian State Centre for Accreditation (BSCA), Belarus
- · GCC Accreditation Centre (GAC)

The idea of signing these MoUs is mutual cooperation for exchange of experience and technical information on accreditation between the parties which includes

- . Close work at international level to assist each other in the field of accreditation or on matters/issues related to accreditation, international standards on accreditation
- · Collaboration to conduct trainings
- · Cooperation with each other for accreditation or related matters of mutual interest at international and regional bodies
- · National Centre of Accreditation (NCA), Republic of Kazakhastan
- · The Belarusian State Centre for Accreditation (BSCA), Belarus
- · GCC Accreditation Centre (GAC)

Assessors' Conclave

ABL has empanelled about 2000 assessors in the field of Testing, Calibration, Medical, PTP and RMP. NABL had organized about 26 assessor conclaves across India viz 8 in Medical, 13 in Testing and 5 in Calibration during 2015-16. These conclaves were conducted with an objective to harmonize the accreditation process vis-a-vis the requirements and to provide a platform to exchange ideas & thoughts for improving and strengthening the accreditation system.

The conclaves involved:

- Discussion over new policies and procedures adopted at the
- Apprising assesso is to inform the laboratories on the





Awareness Programmes

ABL participated in the Workshop organized by Sanjay Gandhi Post Graduate Institute of Medical Sciences, Lucknow wherein NABL apprised the participants about Accreditation and its benefits thereby evolving the road map to accreditation as per ISO 15189:2012.

Further, NABL jointly with Indian Pharmacopeia Commission (IPC), Ministry of Health and Family Welfare has conducted awareness /training programme as per ISO/IEC 17025:2005 for Government Drug Analyst. The participants were from State and Central Drug testing laboratories.



Contribution for Government Schemes

Swachh Bharat Abhiyan is a campaign by the Government of India to clean infrastructure of the country and with an aim to facilitate the scheme, NABL is working closely with Ministry of Drinking Water & Sanitation. In this context, NABL had conducted awareness programs for the Ministry with an objective to ensure safe and clean drinking water to the citizens.

NABL organized an Awareness Program for the Ministry of Drinking Water and Sanitation. The program was attended by 50 participants

from 25 different states comprising of Chief Chemist/ Engineers from testing laboratories. NABL has guided the training institute (CIPET) in conducting training programs on Quality Management systems and Internal audit for Water Quality Testing Laboratories as per ISO 17025:2005 at Chennai, Lucknow, Bhubaneswar and Bhopal. This has helped 30 drinking water testing laboratories in the first phase to gain accreditation



ILAC-IAF Annual Meeting 2016



Mr. Anil Relia, CEO, NABL, addressing the metting

The ILAC-IAF 2016 annual meetings jointly hosted by NABL and NABCB were held at New Delhi from 26th October 2016 to 04th November 2016. The event was successful and received accolades from ILAC and IAF for being a well organized event which served as a forum for fruitful discussions and strategic planning. The event was attended by 300 delegates from about 80 countries.

Many major decisions and course of actions were defined in this annual joint meet marking it a milestone towards excellence in quality. The event came to an end by presenting certificates of MRA by ILAC and MLA by IAF as decided during the meet. Also the event along with providing the space for serious discussions and deliberations gave the participants time to refresh themselves with the glimpse of Indian culture and cuisine as the event was planned during the festive season in India.



National Accreditation Board for Hospitals & Healthcare Providers



First Certificate Award to Medical Value Travel Facilitator (MVTF)

ABH has progressed well in last couple of months. NABH was represented at many events at local, regional and national level. Some of the highlights are as follows:

MoU with Indian Pharmacopeia Commission: An MOU between NABH and Indian Pharmacopoeia Commission is signed to promote reporting of adverse drug reaction under Pharmacovigilance Programme of India (PvPI). This MOU was signed by Dr. B.K. Rana, CEO In-charge NABH and Dr. G.N. Singh, Scientific Director Cum Secretary of Indian Pharmacopoeia Commission in the august presence of Dr. R.P. Singh, SG QCI and other dignitaries including from WHO.



MoU Signed between NABH & Indian Pharmacopoeia Commission in the august presence of Dr. R.P. Singh, SG, QCI.

Accreditation Program for Clinical Trials (Ethics Committee):

A new accreditation program for Clinical Trials (Ethics Committee) was developed by NABH on the request of Ministry of Health & Family Welfare, GOI. It has now been approved by the Ministry to start the program. Program is made available for applications online and two applications have already been received.

Empanelment of Medical Value Travel facilitator (MVTF): NABH has certified two organizations under MVTF empanelment program. Three applications are being processed.

NABH Training Certificates: On an average about 500 certificates are issued by NABH for various training programs. These certificates were in paper form which was requiring preparation, printing and dispatch to participants. Now, all these training certificates have been digitised and are issued as e-copy through existing software. All participants received their certificates through automated email as well these can be downloaded from our site using their registration number.

A user like an employer can verify the authenticity of any certificate by using certificate number. On our website, one can just key in the certificate number and details of that certificate will appear on the screen. To facilitate such verification, this information is printed on each certificate.

This process saved time and money as well as reduced processing time for issuing certificates.



Recognition of NABH by International Hospital Federation (IHF):

IHF, an international association of hospitals based in Geneva, has recognised NABH accreditation to its hospitals as a mark of excellence in quality and safety of healthcare delivery. As a result, IHF has offered NABH accredited hospitals one year free membership of IHF.

Collaboration with ISRO: NABH is collaborating with ISRO to learn safety protocols to improve patient safety under the initiative HealthQuest (Health Quality Upgradation Enabled through Space Technology). The first meeting of this initiative was held at ISRO HQ Bengaluru and inaugurated by Shri A S Kiran Kumar, Chairman, ISRO on January 12, 2017.

Collaboration with Public Health Foundation of India: PHFI and Health Care Without Harm have launched the Health and Environment Leadership Platform (HELP) to lead the efforts in reducing environmental and energy burden, capacity building of physicians on health impact of pollution and advocacy on the importance of intersectional & collaborative policymaking. NABH was invited to join this initiative and participated in its first Steering Committee meeting on February 3, 2017 at PHFI office, Gurgaon.

NABH participated in the first meeting of HealthQuest (Health Quality Upgradation Enabled through Space Technology) held at ISRO HQ Bengaluru and inaugurated by Shri A S Kiran Kumar, Chairman, ISRO on January 12, 2017.





AYUSH assessor training program at India Habitat Center, New Delhi



National Accreditation Board for Certification Bodies

NABCB accredits 3rd party body for Medical Devices Rules

ven as the Central Government has notified Medical Devices Rules, 2017 providing for independent third party notified bodies for auditing medical device manufacturers, the National Accreditation Board for Certification Bodies (NABCB), a constituent Board of the Quality Council of India, which has been designated as the accreditation body under the Rules, has granted the first accreditation for certification as per ISO 13485, the international standard for quality management systems for medical device manufacturers, to a German certification agency, TUV SUD South Asia Private, Mumbai after successful completion of assessments. With this accreditation, TuV SuD would be eligible to apply to the Ministry of Health and Family Welfare to be designated as the notified body.

The Medical Devices Rules prescribe quality management systems based on ISO 13485 for the industry which would be audited for class A and B devices by notified bodies following the European model and NABCB accreditation has been prescribed as a prerequisite for such bodies.

NABCB has signed international mutual recognition arrangement of the international body, International Accreditation Forum (IAF), for QMS which makes it internationally on par with such accreditation bodies in USA, Europe etc. This is expected to enhance acceptability of Indian medical devices in the world market.

NABCB also granted accreditation to TuV SuD for the ICMED scheme ICMED, the first home developed international class certification scheme for the medical devices in the country, an initiative of the Quality Council of India (QCI)) in collaboration with the Association of Indian Medical Device Industry (AIMED. ICMED is aimed at enhancing patient safety, to provide enhanced consumer protection along with much needed product credentials to manufacturers for instilling confidence among buyers and users. This Scheme is intended to significantly eliminate trading of sub-standard products or devices of doubtful origins, a widespread and injurious phenomenon in the Indian market.

NABCB has a **New Chairman**

Mr. Shyamsundar Bang is the new Chairman of NABCB from 01 December 2016. He was nominated by the Chairman, QCI Mr. Adil Zainulbhai for a period of 2 years and has taken over from Mr. N. Kumar who completed his two terms of two years each as the Chairman of NABCB.

Mr. Bang is currently the Executive Director of Jubilant Life Sciences Ltd., the largest specialty chemicals company in India, and is on its Board as a member since 1998. He is also the Managing Director of Jubilant Infrastructure Ltd. which has setup a Special Economic Zone in Gujarat. He is on the board of several other companies in the group.





Dr. R. P. Singh, Secretary General, QCI welcoming Mr. S. Bang, Chairman, NABCB at QCI

Mr. Bang holds a B.Tech. in Chemical Engineering from L.I.T., Nagpur and M.Chem. Engineering from Institute of Chemical Technology (formerly U.D.C.T.), Mumbai. Mr. Bang has a varied industry experience of more than 40 years in operations, implementing new projects, supply chain etc. and has worked in other industries including a chemical company in Thailand before joining Jubilant Life Sciences (formerly Vam Organic Chemicals Ltd.) in 1982.

Mr. Bang is actively associated with the Indian Institute of Chemical Engineers. He was the Chairman of Northern Regional Centre for three years. Currently he is President (All India) of the Indian Institute of Chemical Engineers. Mr. Bang is also the Cochairman of the Manufacturing Committee of the Federation of Indian Chambers of Commerce & Industry (FICCI) and a member of the Managing Committee of the PHD Chamber of Commerce and Industry. Mr. Bang is also associated with several other professional bodies. He is also a regular visiting external examiner at Indian Institute of

Technology (IIT), Delhi for Post-graduate students.

NABCB hopes to immensely benefit from the leadership, vision and guidance of Mr. Bang, and shall further enhance and accelerate its growth on the success already achieved under the leadership past Chairmen of NABCB.

IAF-ILAC **Annual General Meetings hosted in India**

NNABCB and NABL jointly hosted the Joint Annual Meetings of the International Accreditation Forum (IAF) and the International Laboratory Accreditation Cooperation (ILAC), the two international bodies under who the international accreditation framework and the multilateral Mutual Recognition Arrangements exist. These meetings were held from 26 October to 04 November 2016 at New Delhi. These meetings were attended by 325 delegates from 78 countries.

The event spread over ten days had meetings of various technical committees and working groups, where issues related to harmonization of accreditation process at ILAC and IAF were discussed. The purpose of the deliberations was to strengthen the international accreditation framework, to support harmonization of conformity assessment activities and the equivalence of accreditation across the world to facilitate trade so as to enable achieving the common goal "Inspected, Tested or Certified Once, Accepted Everywhere". The final three days had meetings of IAF and ILAC General Assembly, and the Joint General Assembly of ILAC and IAF was on 03 Nov 2016. During these meetings, Ms Merih Malmqvist Nilsson from SWEDAC was elected as the new ILAC Chair.









IAF-ILAC Annual General Meetings 2016 at New Delhi

These meetings also involved hosting of three social activities which included the 'Welcome Dinner' on 28 Oct 2016 at Hotel The Lalit, Delhi, the 'MRA Signing Ceremony Dinner' on 03 Nov 2016 at the Kingdom of Dreams, Gurgaon, and a special 'Diwali Dinner' on 30 Oct 2016 at Garden of Five Senses, Delhi for the delegates. The Diwali dinner was hosted by NABCB and NABL, and was sponsored by some of the conformity assessment bodies. The dinner showcased the Diwali celebrations in India and highlighted the Indian culture. There was a grand firework display during the Diwali dinner which was enjoyed by all the delegates.

NABCB launches new Accreditation Scheme on TDRMS

NABCB has launched a new accreditation scheme for certification bodies in January 2017 for the Trustworthy Digital Repositories Management Systems (TDRMS)

Growing digitalization and the dynamicity of its evolution without backward and forward compatibility necessitates a re-look at the dangers of rapid technological obsolescence. Fragility of the storage devices & media, and continued reduction in size & increase of capacity and performance, compounded with physical threats, like improper storage environment, infrastructure failure, human error etc. endangers the digital content. Preserving digital objects is more challenging than preserving items on paper. and storage media degrades. In recent years, there has been significant progress in developing tools and standards to preserve digital media, particularly in the context of institutional repositories. The most widely accepted standard thus far is the Trustworthy Repositories Audit and Certification - Criteria and Checklist (TRAC), which evolved into an ISO 16363:2012 standard that is used as a basis for certification. This international standard defines a recommended practice for assessing the trustworthiness of digital repositories. It is applicable to the entire range of

The main purpose of this international standard is to provide a basis for the operation of the organizations that will be required to verify the credibility (trustworthiness) of digital repositories based on the ISO 16363 standard and issue an appropriate certification. It is primarily intended to support the accreditation of certification bodies providing such

The standard is seen as a solution to concerns of data preservation for the energy and utilities, healthcare, manufacturing, legal, cultural heritage, and creative sectors. Any industry that has preservation requirements, whether mandatory or voluntary, will benefit from

The NABCB accreditation to Certification Bodies shall be based on requirements of ISO/IEC 17021 and ISO 16919





Online Training Modules on Air Pollution (AP) Monitoring, Prevention, Control and Meteorology, Air Quality (AQ) Modelling & Prediction

National Accreditation Board for Education and Training (NABET), a constituent Board of Quality Council of India will shortly be launching online training modules on AP & AQ.

· Mode: Online

• Number of Modules: 6

Course Objective: To create a set of knowledge bank for the capacity building in professionals working in the field of environmental science and EIA related activities.

Suitability of the Course: EIA Professionals, Teachers, Students, people from NGOs, Professionals from Industry, Pollution control authorities and those who are interested in air pollution issues & impacts.

The AP-AQ online training course will include a gamut of knowledge about the EIA process and shall be extremely useful for the Functional Area Experts (FAEs) of EIA consultant organizations. Following modules are discussed in detail both from the point of view of knowledge enhancement and practical applications:

- Module 1: Introduction and Basics of Atmospheric Sciences
- Module 2: Rules and regulations as applicable to Air Pollution aspects in EIA
- Module 3: Air Pollution Monitoring and Analysis
- Module 4: Assessment of Potential Pollution generation
- Module 5: Impact Identification, Assessment including Modelling
- Module 6: Air Pollution prevention and Mitigation

Course fee:

- For Professionals (other than students): Rs.7500/module/participant + (15% service tax)
- For students: Rs.3,000/module/student + (15% service tax)

Mode of payments: NEFT/DD in favour of 'Quality Council of India' payable at New Delhi.

Registration mode: Online through www.qcin.org



National Board for Quality Promotion

National Quality Campaign (NQC) Programs by National Board for Quality Promotion (NBQP)

he National Board for Quality Promotion is entrusted with the responsibility of implementing the National Quality Campaign Program of Govt. of India.

The Board has conducted awareness programmes across various regions of the country. A snapshot view of those programmes are presented below.

S. No.	Programme Name	Organized in association with	Date	Location
1.	Operational Excellence through Lean and KAIZEN	Kumaun Garhwal Chamber of Commerce & Industry, Kashipur, Uttarakhand	Sep 7, 2016	Kashipur
2.	Transition to ISO 9001:2015 and Risk Management Practices	Centre for Electronics Test Engineering, STQC Directorate, Hyderabad, Telangana	Oct 20 – 21, 2016	Hyderabad
3.	Practical Risk Assessment based on ISO 9001:2015 (Quality Management Systems)	Institute of Quality Management & Research, Bhopal, Madhya Pradesh	Oct 26, 2016	Bhopal
4.	Practical Risk Assessment based on ISO 9001:2015 (Quality Management Systems)	Andhra Pradesh Chamber of Commerce & Industry Federation, Vijayawada, Andhra Pradesh	Nov 11, 2016	Visakhapatnam
5.	Operational Excellence through Lean and KAIZEN	Kumaun Garhwal Chamber of Commerce & Industry, Kashipur, Uttarakhand	Nov 26, 2016	Rudrapur
6.	Operational Excellence through Lean and KAIZEN	CIISuresh Neotia Center of Excellence For Leadership, Kolkata, West Bengal	Dec 1, 2016	Kolkata

The programmes were very well appreciated by the delegates. A total of around 350+ received learnings on the above subjects. The Board is continuing with these activities.















Contributed by : Amit Kumar Singh, Assistant Director- NBQP



National Accreditation Board for Education and Training

Environmental Updates

Action of Hon'ble Supreme Court on water treatment:

a. Yamuna pollution: Supreme Court seeks report on sewage treatment plants

River Yamuna is one of the most polluted rivers of India. The discharge of untreated domestic and industrial effluents have severely affected the quality of Yamuna River and now it falls under the category E, which makes it fit only for recreation and industrial cooling, completely ruling out the possibility for underwater life and domestic supply as per Journal of Water Resource and Protection. For further information on court directives, refer to link http://timesofindia.indiatimes.com/home /environment/pollution/yamuna-pollution-supreme-court-seeks-reporton-sewage-treatment-plants/articleshow/57257387.cms



b. SC warns polluting industries to shut if not able to treat effluent

Hon'ble Supreme Court has directed all state pollution control boards (PCBs) to issue a common notice to all individual industrial units to ensure availability of functional primary effluent treatment plants as mandated by Law. It is further directed that state PCBs will ask the electricity supply boards concerned to disconnect power supply to defaulting industrial units following an inspection after 3 months of the notice. Government bodies will have to establish Common Effluent Treatment Plants (CETPs) across the country within three years and submit reports to concerned bench of National Green Tribunal.

For further information on court directives, refer link:

http://timesofindia.indiatimes.com/home/environment/pollution/shutshops-if-you-cant-treat-effluents-sc-warns-pollutingindustries/articleshow/57297253.cms

Thermal power plant emissions: MoEFCC zeroes in on FGD:

Coal used a fuel in Thermal Power Plants contains sulfur which gets converted to sulfur dioxide (SO2) on burning of the coal in boilers. The sulfur dioxide coming out of boiler chimney reacts with water vapours in the atmosphere forming Acid which gets precipitated as Acid rains with first rains. Such precipitation may adversely affect Vegetation including crops and corrosion of steel structures.

Following the MoEFCC's notification of new environmental standards to reduce particulate matters by 65%, oxides of nitrogen (NOx) by 70% and Sulphur dioxide (SO2) emissions by 85%, use of Flue Gas Desuplhurization technology has been recommended especially to meet the SO2 emission norms. Plants commissioned between 1990 and 2008 will also need implementation of FGD technology besides up gradation of electrostatic precipitators (ESP) and installation of retrofit boilers to reduce emission of particulate matters and NOx. However, plants of smaller size installed after 2008 require upgraded ESPs and retrofit boilers.

For further information, refer link:

http://www.financialexpress.com/india-news/thermal-power-plantemissions-moefcc-zeroes-in-on-fgd-environmentalists-say-techoutdated/568118/



CPCB modified the directions regarding the harmonisation of classification of industrial sectors under Red/Orange /green/white categories :

Based on the 'Pollution Index - PI', industrial sectors have been categorised into four colours categories namely:



- 1. Red category: PI score of 60 and above considered as severely polluting industries.
- 2. Orange category: PI score of 41 to 59- considered as moderately polluting industries.
- 3. Green category: PI score of 21 to 40 considered as significantly low polluting industries.
- 4. White category: PI score below and upto 20 considered as nonpolluting industries.

For further information, refer link: http://cpcb.nic.in/upload/Latest/ Latest 118 Final Directions.pdf

CPCB modifies the mechanism for granting consent to the categories of industries/projects:

The Central Pollution Control Board ("CPCB"), has issued a circular dated 2nd February, 2017, revising the grant of consents of various categories of industries (Red/Orange/green /white categories) under 'The Water (Prevention & Control of Pollution) Act, 1974' and 'The Air (Prevention & Control of Pollution) Act, 198. For further information on consent process, refer to link http://www.lexplosion.in/cpcb-modifies-themechanism-for-granting-consent-to-the-categories-ofindustriesprojects/

SPCBs/PCCs may issue consent to the industries as follows:

- Red category of industries for 5 years (these industries will not be permitted to establish in eco-sensitive areas and protected areas).
- Orange category of industries for 10 years.
- Green category of industries for 15 years.
- No necessity of consent for non-polluting industries i.e white categories.

Graded Response Action Plan for control of Air Pollution in Delhi and NCR:

The Graded response action plan was submitted by CPCB which is required to be taken as and when the concentration of pollutants i.e particulate matter, reaches a certain level in Delhi and NCR.

MOEFCC has issued a notification dated 12th January, 2017 wherein the Central Government considers it appropriate to entrust the task of implementing the Graded Response Action Plan as a measure under sub-section (1) of section 3 of the Environment (Protection) Act, 1986 (29 of 1986) to the Environment Pollution (Prevention and Control) Authority (hereinafter referred to as 'EPCA') in compliance to the Hon'ble Supreme Court in its order dated the 2nd December, 2016.. For further information on consent process, refer to link http://envfor.nic.in/sites /default/files/Gazette%20Notification%20dated%2012.01.2017%20en trusting%20implimentation%20of%20Graded%20Response%20Action %20Plan%20to%20EPCA%20.pdf

6. MoEFCC Notification dated December 09, 2016-S.O.3999 (E) Integration of environmental conditions in building bye-laws:

The Ministry has come out with a Notification wherein the Environmental clearance aspects have been proposed to be integrated with building bye laws. Clearance for these projects for built up of 5,000 to 3,00,000 Square meters will now be given by local authorities in place of MoEFCC authorities at central and state levels.

Such projects have been categorised as follows based on built up area:

- 1. (Category '1': 5,000 to less than 20,000 Square meters)
- (Category '2': 20,000 to less than 50,000 Square meters)
- (Category '3': 50000 to 150000 Square meters)
- 4. (Category '4': 150000 to less than 3,00,000 Square meters)

QCI-NABET for Accreditation of QBEAs and also the training of such QBEAs.

QCI-NABET Accredited consultant organizations for Building and construction projects have also been recognized as QBEAs in the said Notification. Also, QCI-NABET has been entrusted the job of developing suitable accreditation scheme forr QBEAs and provide necessary training to such QBEAs.

The Notification has also come out with a new category for sector Townships and Area Development projects' with built up area of ≥ 3,00,000 sq. mtrs or Covering an area ≥ 150 ha as Category 'A' for which Environmental clearance is required.



Contributed by: Preeti Pawaria Khatri, NABET





- QCI celebrated its first Foundation Day on January 20, 2017 to mark its journey towards improving quality of life during the past 20 years. An evening program was organized at Hotel Hyatt Regency, New Delhi to commemorate the completion of 20 years of QCI's existence. The event was coordinated by NBQP Committee and sub committees comprising of members from all the Boards.
- The function was attended by more than 400 participants. Dr. R.P. Singh, Secretary General QCI, welcomed all the guests, speakers and the delegates. Dr. R.A. Mashelkar, Past Chairman (QCI) was the Chief Guest of the event.
- Chairman QCI Mr. Adil Zainulbhai and Secretary General Dr. R.P. Singh, along with Dr. R.A. Mashelkar, Past Chairman (QCI); Dr. Girdhar J. Gyani- Past Secretary General, QCI; Mr. Arun Maira-Immediate Past Chairman (QCI) and Gurudev Swami Bharat Bhushan ji (Padma Shri) were present on the dais.





Day



- . Long Service Award was given to 12 employees of QCI who have served the organization for a decade or more
- . A film on QCI and Coffee Table Book were released by the Chief Guest and Chairman QCI
- · Cultural Program: This was an in-house event organized by all the Boards of QCI. Group dances, solo songs and comedy shows and skits etc. were performed by the QCI Staff.
- All the dignitaries expressed their good wishes on a message board placed at the venue. Visitor Book was also provided for the participants to share their thoughts.
- . Mr. C. K. Biswas , CEO NBQP expressed Vote of Thanks to the Chief Guest and the participants.









Contributed by: Kokila Gaur, NBQP

The Sustainable **Growth Impetus** for MSMEs in India

Abhinav Bajaj & Vipin Sahni, NABET

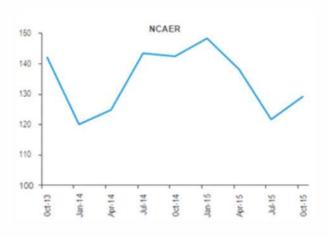
The Indian Growth Scenario

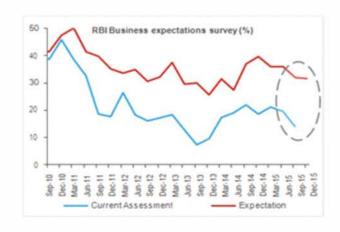
In recent years, the Indian economy has shown an excellent growth performance with annual growth rates closing in on 8 per cent per annum.

The economy rebounded strongly over the past fiscal year and is among the leaders in exiting the global recession. A prompt response, monetary easing, increased government consumption, an improving global economic environment, a return of risk appetite, and large capital inflows were instrumental in the bounce back.

Monetary tightening and withdrawal of fiscal stimulus are underway. It is pertinent to address infrastructure bottlenecks and reform the agriculture sector to sustain long-term growth.

Surveys by the National Council for Applied Economic Research and the RBI show that business sentiment has started to improve after falling earlier in 2015. This has to do with recent government initiatives to push the pedal of reforms, especially FDI, and to improve the ease of doing business.





MSMEs and the Indian Economy

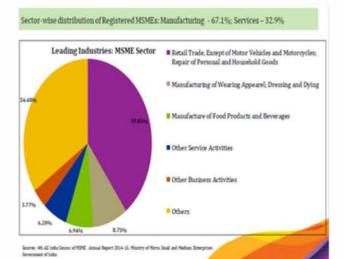
In India, the term "MSME" is relatively new — the government only adopted the official definition of MSME in 2006, comprising micro, small and medium enterprises. The table below represents the definition as stipulated under Micro, Small and Medium Enterprise Development Act (MSMEDA) of 2006.

Classification of MSME(s)				
Enterprises	Manufacturing Enterprises : Investment in Plant & Machinery	Service Enterprises : Investment in Equipment		
Micro	Up to INR 25 Lakh	Up to INR 10 Lakh		
Small	INR 25 Lakh – INR 5 Crore	INR 10 Lakh – INR 2 Crore		
Medium	INR 5 Crore – INR 10 Crore	INR 2 Crore – INR 5 Crore		

Micro, Small and Medium Enterprises (MSMEs) contribute nationally:

- · 45% of the manufacturing output
- · 40% of the exports
- · 21% of employment 2nd highest after agriculture





Working in tandem with the larger goal of pushing for economic growth, the implementation of many reforms made the SME/start-up space relatively bullish in 2016. These include re-implementation of Public Procurement Policy, Pradhan Mantri MUDRA Yojana, Make in India, Startup India, and Skill India. Aimed at increasing growth of manufacturing sector by 12-14% per annum and increase its share of GDP to 25% by 2025, the government plans to make financial and technical support more accessible. Also, the announcement to implement GST Bill in 2017 is a landmark decision particularly for MSMEs as GST bill will help eradicate indirect taxes, have more transparency of tax process, draw projections of production cost and gain easy access to new geographies for business expansion.

In this regard, as per Grant Thornton's 'Vision 2020' document, the sheer magnitude of the Micro, Small and Medium Enterprises (MSMEs) sector, with Rs 20 lakh crore of goods and services they produce—contribute as much as 40% to Gross Domestic Product (GDP) of India.

Together, they make the engine of incessant growth, providing livelihood to millions of people and creating value for the entire global community.

MSME's Outlook on sustainability and energy efficiency

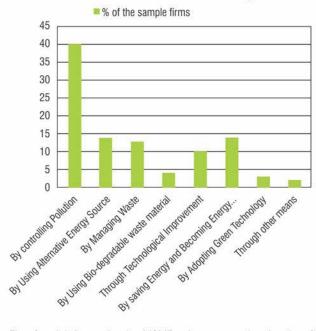
With the view of country's current economic trend and global market scenario, it has become an immediate imperative for any MSME to ensure its future plans are aligned with the sustainable growth avenues currently at their disposal. Not doing so shall ensure an evitable tipping over of an already full cup of woes, owed to the highly global competition and ever-demanding customer base they wish to cater to. These sustainable and clean-n-green options of production are not only environment friendly and in many cases incentivized by the govt.; but have also been proven to be profitable.

However, what is MSME sector's outlook with regard to adopting a sustainable course of action when it comes to various aspects of their production and working?

It is often claimed that embracing energy efficient and sustainable production processes enhances a firm's profit margin by reducing the cost of production. In India, energy efficient MSMEs constitute a negligible share of the entire MSME population. There may be several reasons for this non-adoption, e.g., too long payback periods, asymmetric information regarding energy efficient technology, cost of adopting such processes, infrastructure bottlenecks to adoption, etc.

A major indicator in this regard is a study conducted by UNIDO which was so designed to understand the prevalent mindset of MSMEs in the country when it comes to actively adopting energy efficient and sustainable measures. Environment is one of the three pillars of the "business contribution" to sustainable development. MSMEs response to the importance that should be given such a critical part of sustainability as environment illuminates a lack of organized approach to sustainability on their part. To the question as to how a firm can become environmentally friendly, 40 percent of sample firms mentioned that firms must try to control pollution. Nearly 60 percent of these firms (which claim that controlling pollution is important for becoming environmentally friendly) did not recall any other means on how to become environmentally friendly. A handful of firms mentioned other measures such as the use of alternate energy sources, the use of energy efficient machinery and prudent waste management, etc. as means to become environmentally friendly.

How can firms become environment friendly?



Therefore, it is imperative that MSMEs adopt a comprehensive plan of action when it comes to long-term sustenance and holistic growth avenues.

Government of India's Impact and Initiatives towards sustainability - Highlights

The Government of India has taken several initiatives to promote a healthy and sustainable environment for the growth of manufacturing sector in the country. Some of the notable initiatives and developments

> The Technology Acquisition and Development Fund (TADF) under



the National Manufacturing Policy (NMP) to facilitate acquisition of Clean, Green and Energy Efficient Technologies, by Micro, Small & Medium Enterprises (MSMEs). The fund supports, via subsidies, manufacturing of equipment/machines/devices for controlling pollution, reducing energy consumption and water conservation.

 Technology Acquisition Fund Programme (TAFP) especially focusing on few Futuristic & Revolutionary areas e.g. a) Internet of Things (IoT) b) Additive Manufacturing c) Industrial Energy Efficiency through Equipment

For more information on TAFP and TADF, visit: http://www.gita.org.in

- > National Science and Technology Entrepreneurship Development Board of the Department of Science and Technology, Govt. of India is supporting Technology Business Incubators primarily in and around academic, technical and management institutions to tap innovations and technologies for venture creation by utilizing expertise and infrastructure already available with the host institution.
- > Technology, Information, Forecasting and Assessment Council has several programs running especially for MSMEs.
 - · One such program is the TIFAC-SIDBI programme. This programme is aimed at identification, assessment of technology innovations and to facilitate scaling up by industries particularly MSMEs. Technical assessment is carried out by TIFAC while SIDBI carries out the financial appraisal.
 - Technology Refinement and Marketing Programme (TREMAP) has been a unique programme of TIFAC. The objective of the programme was to establish an enabling ecosystem in the country to facilitate linkages of innovative technologies with the market. The support was provided to select innovations through a network of Technology Commercialization Facilitators (TCFs) by facilitating Technology Validation and Certification, Technology Transfer / Licensing Facilitation etc.
 - Under the cluster upgradation initiative of TIFAC, a diverse and geographically wide spread set of MSME clusters have been chosen for intervention along with proximate Academic or R&D knowledge Institutes.

For more information on any of these programs, visit: www.tifac.org.in

- A Fund for Technology Development and Application has also been introduced. To administer the fund, the Government has constituted a Technology Development Board. National awards for successful commercialization of indigenous technology are also given under its aegis:
- 1. Cash award of Rs. 10 lakhs each to An industrial concern that has successfully commercialized the indigenous technology and the technology provider
- 2. Cash award of Rs. 5 lakh to SSI unit that has successfully commercialized a product based on indigenous technology
- ➤ Ministry of MSME provides support to implementation of Lean

Manufacturing practices in MSME by subsidizing 80% of the consultant's fees. Quality Council of India is the National Monitoring and Implementation unit for this Lean manufacturing Competitiveness Scheme and is currently successfully running 200+ clusters (900+ MSME units). For more information, visit: www.qcin.org

- M/o of MSME's scheme for assistance for Quality Control and Standardisation provides:
- Financial assistance under Performance and Credit Rating
- 75% of the fee is reimbursed for carrying out rating through empanelled rating agencies
- Funding support for conducting 'QMS (Quality Management Standards) Awareness' workshops
- Reimbursement of registration fee for Bar coding
- A large number of MSMEs have registered themselves on Udyog Aadhaar Memorandum to avail the benefit of UAMs. For instance 54,671 MSMEs have registered themselves in '14-16 in Maharashtra itself.
- Technology Upgradation has been given a major boost with credit linked subsidies provided to MSMEs to successfully undertake a technological overhaul of their factory. For '14-'16 for instance, 602 MSMEs in Rajasthan were provided subsidies worth 42.08 Cr. for technological upgradation.

The Road Ahead

The Government of India has an ambitious plan to locally manufacture as many as 181 products and establish India as a manufacturing hub for foreign investment. The move could help MSMEs linked to infrastructure sectors such as power, oil and gas, and automobile manufacturing that require large capital expenditure and revive the Rs 1,85,000 crore (US\$ 27.42 billion) Indian capital goods business.

These anticipated trends of economic fortitude, especially long-term, rest single-handedly on the shoulders of MSMEs of India. An approach to capitalize on the avenues available for adopting a sustainable, green, clean and optimal technology and production methods is the only way by which we can endure the ordeals of an insecure global marketplace. The onus is on MSMEs to band together and proactively take advantage of these new initiatives and ensure that they stay ahead of the curve. And what better way to do so if they can also ensure an eco-friendly, harmonious and enduring future along the way?

Sources:

- ➤ www.gita.org.in
- Crisil outlook fiscal 2017
- Approach to energy efficiency among micro, small and medium enterprises in India: Results of a field survey - UNIDO
- www.dcmsme.gov.in
- Grant Thornton, 'Vision: 2020'
- www.vibrantgujarat.com



India National Platform on Private Sustainability Standards

Dr Manish Pande, Joint Director & Head PADD and Rudraneel Chattopandhyay, QCI

he India National Platform on Private Sustainability Standards has been initiated under the Secretarial oversight of Quality Council of India to facilitate dialogue between core public and private stakeholders on how to maximize the sustainable development benefits and market access opportunities of private sustainability standards (PSS), whilst addressing potential challenges and cost of PSS implementation, in particular for small-scale producers.

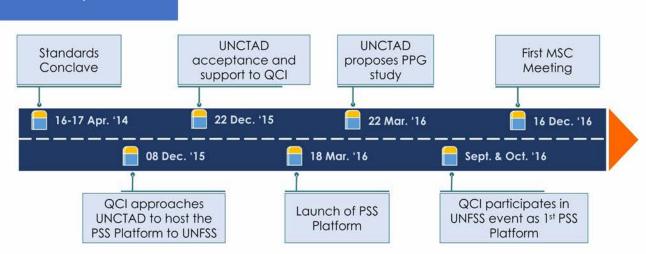
PSS are voluntary standards created by private entities for promoting sustainable production, business practices and consumption by creating market demand for sustainable products, and a supply to meet that demand. In the past 2 decades, they have emerged as standards specifying requirements relating to a wide range of sustainability metrics, including workers' health and safety, environmental degradation, respect for human rights, and others. With almost 500 standards/labels in 199 countries and 25 industrial sectors, the PSS system has become the new market reality as a tool for sustainable supply-chain management, marketing and competitiveness, thereby addressing the most pressing social, environmental, and financial challenges of our time. These standards are developed in partnership with a range of non-governmental actors such as civil society groups and businesses.

The National Platform, which is supported by the United Nations Forum on Sustainable Standards (UNFSS), was formally launched on 18 March 2016, by Commerce Secretary Ms. Rita Teaotia, in presence of highlevel representatives from UN organs, consulates, government, statutory bodies, industry associations, global retailers, private standard bodies, and donor agencies. This Platform is the result of a collaboration between the Quality Council of India (QCI) and the UNFSS, and is meant to be driven by its stakeholders under the coordination of QCI and the Ministry of Commerce & Industry, Government of India.



MSC Meeting of 16 December 2016

Journey so far



Panchakarma Clinic **Accreditation Programs**

anchakarma is one of the most emerging parts of Ayurveda as it plays a very important role in the effective management of life style disorders which are on increase at a high rate. It is practiced in different parts of India and in many other countries. Panchakarma treatment is unique in the sense that it includes preventive, curative and promotive actions for various diseases. Panchakarma purifies and detoxifies the body by expelling metabolic toxins and helps in maintaining normal functioning of the body, improving metabolism and body coordination.

Therefore, it is important that such services are offered in a scientific and reliable manner by trained and competent professionals. To ensure this, accreditation of Panchakarma clinics is a way forward. Accreditation provides a framework which helps a healthcare organisation to establish objective systems aiming to improve patient safety and quality of care. NABH, in order to operate specific accreditation program for Panchakarma clinics, has developed these accreditation standards with the help of experts in this field.

NABH Standards for Panchakarma Clinics Accreditation comprises objective elements and corresponding interpretation and remarks. It explains the objective element and methods to achieve the same wherever possible.

The Panchakarma Clinic participating in accreditation will be expected to provide three types of evidence:

- · Approved documents that identify relevant service policy, protocols and/or strategies and set out how the clinic plans to deliver each standard and objective element therein. Templates and formats for these documents are available at NABH website.
- Evidence that demonstrates that the Panchakarma Clinic is implementing these policies, protocols and/or strategies. This is done by peer review physical assessment.
- · Evidence that demonstrates that the Panchakarma Clinic is monitoring and evaluating its performance regularly in the implementation of its policies, protocols and strategies. Accreditation is not a one-time process but consists of continuous surveillance and support.

NABH Standards for Panchakarma Clinics Accreditation defines the Panchkarma clinic where services are offered on OPD and Day Care basis. If some procedures require prolong observation and







hospitalization, then they are excluded from the scope of services at the clinical level. They are covered under Ayurveda Hospital Accreditation Standards.

The Accreditation Standards for Panchkarma Clinics have been published after due public consultation and launched by Shri Shripad Naik, Hon'ble Union Minister of State (Independent Charge) Ministry of AYUSH in Dec 2016 at World Ayurveda Congress 2016, Kolkata. These standards are also endorsed by Ministry of AYUSH.

To make this program easily adoptable for large number of Panchakarma clinic owners, various templates and formats for clinical documentation were developed. It was a huge initiative and has happened for the first time in any NABH accreditation program.

These standards are available as freely downloadable at the following web links http://nabh.co/PanchkarmaStandards.aspx

Beside Panchakarma clinic accreditation, NABH is already operating Accreditation program for Ayurveda Hospitals and Accreditation program for Homeopathy Hospitals.

Accreditation standards for both the above programs are as per international standards, freely downloadable from NABH website and are endorsed by Ministry of AYUSH.

Renewal permission letters, issued by Ministry of AYUSH to all AYUSH Medical Colleges have mentioned that the compliance of NABH accreditation of the attached teaching hospitals is one of the necessary conditions.

In India there are 297 Ayurveda, 19 Yoga and Naturopathy, 46 Unani, 9 Siddha and 197 Homeopathy Medical Colleges registered with Central Council of Indian Medicine. As per Renewal permission letter from Ministry of AYUSH, teaching hospitals associated with these medical colleges need to implement NABH AYUSH Accreditation Standards

Many of these hospitals have already started the process. NABH is also conducting three-day training programs for standards implementation at many institutions. In the last couple of months more than 30 training programs have been conducted at various institutions, including at all the National AYUSH Institutes, under Ministry of AYUSH, Govt of India.

All National AYUSH Institutes have been advised by Min of AYUSH, Govt of India to apply for NABH Accreditation program.

- All India Institute of Ayurveda, Delhi
- Institute of Post Graduate Teaching & Research in Ayurveda, Jamnagar. (WHO collaborating Centre for Traditional Medicine)
- Morarji Desai National Institute of Yoga, Delhi. (WHO Collaborating Center for Traditional Medicine)
- National Institute of Ayurveda, Jaipur
- National Institute of Homeopathy, Kolkata
- National Institute of Naturopathy, Pune
- National Institute of Siddha, Chennai
- National Institute of Unani Medicine, Bangalore
- North Eastern Institute on Ayurveda & Homeopathy, Shillong

NABH has conducted three-day training program on standard implementation at all the National institutions except Shillong and Pune.

NABH is also a collaborative partner in all National / State level Arogya fairs which are being organised by Ministry of AYUSH. NABH has participated in all events and has gathered rave reviews. This also has positively impacted the number of Accreditation applications and training programs.

As per guidelines issued by Ministry of AYUSH for insurance coverage of Ayurvedic treatment, 25% hike on benchmark rates are applicable for the treatment taken in NABH accredited hospitals. This information is displayed at website

Ministry of AYUSH publishes updated list of NABH accredited AYUSH hospitals at its website.

http://ayush.gov.in/event/list-nabh-accredited-ayush-hospitals

Studies on Atmospheric Aerosols and **Dust Particles** during the Pre Monsoon Season



Dr. S.K. Mishra, Joint Director, NABET

Preface

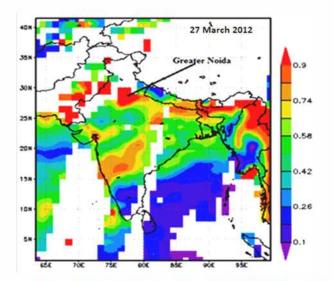
Atmospheric aerosols over the Indo-Gangetic Plains (IGP) region are subject of significant temporal and spatial variability. In the last few years, extensive studies have been carried out to investigate the physico-chemical and optical properties of aerosols. Aerosols over India exhibit strong seasonal and inter-annual variability. The Indo-Gangetic Plain (IGP), in the northern part of India, is among the most densely populated as well as polluted planes and is considered as heavy aerosol-laden regions of the world (Gautam et al., 2011). With the increase in the population density and energy demands, aerosol emissions have been gradually increasing, mainly through fossil-fuel and bio-fuel combustions (Lawrence and Lelieveld 2010). The high aerosols concentration over the region is responsible for the deterioration of the air quality which impacts the human health and surrounding atmosphere. However, aerosols over the IGP exhibit a pronounced seasonal and inter annual variability and are strongly dependent on the anthropogenic and natural aerosol emissions. As reported by the earlier workers, the anthropogenic aerosols are mainly due to the large carbonaceous and sulfate emissions from fossil-fuels and bio-fuel combustions.

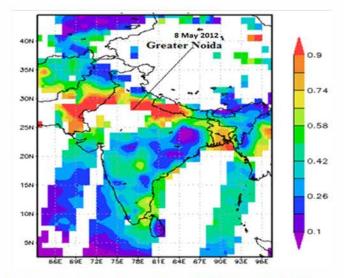
Observation & Findings

The dust and aerosol properties have been discussed for the period March to June for both the dusty and non-dusty days. In order to investigate the characteristics features of the aerosols during the summer and pre monsoon seasons, we carried out experimental studies and focused on the dust particles near Noida/Greater Noida region using standard equipment like Micro-top Sun photometer. Micro top Sun photometer Spectral Aerosol Optical Density (AOD) shows a gradual increase during March with highest value of 1.44 at 440 nm wavelength. The spectral variation of AOD clearly depicts that at shorter wavelength, AODs are higher while at longer wavelengths they are relatively lower attributing to the presence of fine to coarse particles as observed also by earlier worker, Reddy and Venkataraman, (2002).



Based on the experimental findings, scientific investigations have been carried out to spell out the quality of the air and characteristics of aerosols. Figure 1 shows the spatial distribution of Aqua-MODIS AOD550 over the Indian subcontinent during the most intense Dust Event (DE), (March to May). It is clearly observed from the figure that the AOD at specific wavelength of 500 nm over Noida/Greater Noida region is much higher. The maximum value -1.44 and -1.33 of AOD500 have been observed during the dust periods March to May, respectively. The aerosols and pollutants move over the southeastern Delhi with the assistance of dominant western/northwestern winds.





Figures 1. Spatial distribution of Aqua-MODIS AOD550 over the Indian subcontinent during the most intense DE, March and May 2012.

Subsequently, Figure 2 shows the average variations in spectral AOD during the period of dust storm. Micro top Sun photometer Spectral AOD shows gradual increase with highest values of 1.44 at 440 nm Wavelength. It is also evident that at lower spectral wavelength of 440nm, the minimum, maximum and average values of AOD are 0.54, 1.47 and 0.99 respectively, while at the maximum wavelength of 936 nm spectral channel, the minimum, maximum and average values for the AOD are 0.35, 1.14 and 0.65, respectively over the Noida/Greater Noida region.

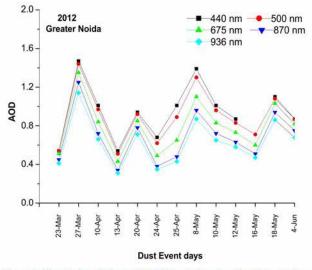


Figure 2: Spectral variation of MT AODs during the Dust Events days.

Conclusion

The dust storm events during the pre-monsoon season over the Noida/Greater Noida region have been studied with the support of ground-based observations. Micro top Sun photometer Spectral AOD shows gradual increase during the month of March with highest value of 1.44 at 440 nm Wavelength. The maximum value of the AOD500, ~1.44, ~1.33 have been investigated for March to May, respectively.

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Lawrence M G and Lelieveld J 2010 Atmospheric pollutant outflow from southern Asia: a review Atmos. Chem. Phys. 10 11017-96

Reddy, M.S., Venkataraman, C., 2002. Inventory of aerosol and sulphur dioxide emission from India: II-Biomass combustion, Atmos. Environ. 36,699-712.







Business Membership Organizations(BMOs)	ВМО Туре	Grade/Validity
I am SME of India -Integrated Association of Micro, Small & Medium Enterprises of India	National	Gold 13 Jan 2018
ALEAP Association of Lady Entrepreneurs of India ALEAP – Association of Lady Entrepreneurs of Andhra Pradesh	National	Gold 13 Jan 2018
IIF-Institute of Indian Foundrymen	National	Gold 13 Jan 2018
COSIA – Chamber of Small Industry Associations	National	Silver 13 Jan 2018
IIA – Indian Industries Association	National	Gold 20 Dec 2018
TANSTIA - TamilNadu Small & Tiny industries Association	State	Gold 12 Jul 2019
TANSTIA FNF- TANSTIA FNF Service Centre	State	Gold 12 Jul 2019
AIPMA -All India Plastics Manufacturing Association	National	Gold 12 Jul 2019
DAT - Dyers Association of Tirupur	Cluster	Gold 15 Aug 2019
TTPK PROTECT-IMPROVE-SUSTAIN TTPK - Tirupur Thozhil Pathukappu Kulu	District	Gold 15 Aug 2019
MAIT	National	Gold 15 Aug 2019
CMIA-Chamber of Marathwada Industries and Agriculture	State	Gold 21 Nov 2019

	National	
CEII Confederation of trailers industries	National	
CII o con a		Diamond V
CII-Confederation of Indian Industry	State	21 Nov 2019
CVE LEGISLAND	State	
COWE-Confederation of Women Entrepreneurs of India		Gold
		21 Nov 2019
HCCI	District	→
di di		Silver
HCCI -Himachal Chamber of Commerce & Industry		21 Nov 2019
(CIA)	National	1
6875 160		Silver
CICU -Chamber of Industrial & Commercial Undertakings		21 Nov 2019
PHD	National	
PHDCCI -PHD Chamber of Commerce and Industry		Diamond
,		21 Nov 2019
FGI	State	1
₩		Gold
FGI- Federation of Gujarat Industries		6 Dec 2019
	District	
		Silver
		6 Dec 2019
BMPA- Beach Minerals Producers Association of India		0 500 2015
Automotive Component Manifestures Association of Initia An ISO 9001:2005 Certified Association	National	
ACMA- Automotive Component Manufacturers Association of		Diamond
India	B1	6 Dec 2019
(Constant of the Constant of t	District	
CIENAL ATROOFD Institute of the contract of th		Gold A
GIEMA-ATPC&ED Institute- Gulbarga Industrial Estate Manufacturers Association & ATPC & ED Institute		6 Dec 2019
	National	
		Diamond
IRMRA- Indian Rubber Manufacturer Research Association		6 Dec 2019
MAS	District	-
WAS .		Silver
MAS-Manufacturers' Association Of Satara		30 Jan 2020
Federation of Associations of Cottage & Small Industries, W.B.	National	
FACSI		Silver
FACSI-Federation of Cottage & Small Industries		30 Jan 2020
	District	A
W		Gold
CODISSIA-Coimbatore District Small Industries Association		30 Jan 2020
MADITSSIA MADINIUSTRICE PHAY AND EMALE DICALE PRODUSTRICE ACRESIONATION	District	◆
MADITSSIA-Madurai District Tiny and Small Scale Industries		Gold A
Association		30 Jan 2020



NBQP Celebrates **World Quality Month**

November 2016

orld Quality Day is celebrated every year around the world in November. The day was designed to increase worldwide awareness of the important contribution that quality makes towards both organizational and national growth, and prosperity. The World Quality Day gives an opportunity to organisations to celebrate

The seminar commenced with a welcome address by Mr. Avik Mitra (Sr. Advisor, NBQP). Mr. Mitra apprised that the seminar was first of its kind with its main objective to showcase the best practices and Being Customer Driven is the best thing one can possibly be, whether one is in service, production or behind the scenes. We all play a part in the



their achievements and show how quality approaches can make a tangible impact on business.

NBQP/QCI celebrated the Quality Month 2016 in the month of November December, 2016 with an objective to recognize the importance of an overall quality focus and to promote awareness on quality and to emphasize learning and sharing of knowledge in Quality, Innovation and Best Practices as well as for facilitating development of a quality culture. The same was facilitated by organizing multiple online competitions, viz. Poster Making, Kaizen Implementation, Slogan Writing, Quality Quiz and Essay/Quality Success Story.

This year the theme of the event was "Delivering Customer-driven Quality". This attempt of NBQP to explore the Quality-themed outlook of the people was for all and spanned nearly for 2 months starting from October 10 - December 5, 2016. Some of these competitions received a roaring response from all across the country. The winning entries were facilitated with gift hampers and Certificates in the workshop organized by NBQP/QCI in New Delhi.

NBQP also organized a full-day seminar at National Productivity Council on December 16, 2016 on the topic "Delivering Customer-driven Quality". The seminar saw engaging discussions on the key theme of how Quality begins with the customers and ends with them as well. So, delivering customer-driven quality acquires a huge significance.

customer service process and being customer driven is the core of this quality process.

The Seminar witnessed representations by Quality professionals from different domains. Overall, it was a knowledgeable session and definitely provided impetus in nurturing the Quality culture among the audience.



Opinions of the key speakers



Major General N K Dhir

Mr Dhir stated that Quality by definition has to be customer driven. He said that this is evident from the evolution of various quality concepts, which were not developed by academia but by professionals on the shop floor or market place. Initially these were evolved in manufacturing sector but now fully extended to service sector and project management. The focus has always been and still is on the customer satisfaction. Compass Model is very practical approach for making customer-driven quality. He said that no quality improvement initiative will succeed unless the leaders focus on human side of quality, namely creating engaged work force.



While clearly stating that there is no unique 'route', Mr. Gupta highlighted vital principles, directives and advisories of/from QMS specially ISO-9004 for sustained 'delivery of customer driven quality'. One of the most important aspects is to anticipate & plan for the future needs of customers and to steer the company accordingly. The data based cases of the failures of Kodak and Nokia were interesting and relevant. Finally everything converges to the quality of leadership which drives all aspects of the organization.



Dilip Kumar Gayen

Spoke on Business Strategy on customer satisfaction by best quality practices and development of internal Quality Scorecard. Quality scorecard serves the purpose of monitoring the improvement related customers' complains and suggestions. Presentation also covered the causes of failures to provide quality services to your customers and study based factors and parameters for measuring the internal process of quality improvement in a manufacturing unit.



He said that if one follows all the standards in any particular area of manufacturing and delivers high quality product at a reasonable price, country of origin shouldn't matter. Products should deliver the end result to customers' utmost satisfaction, besides maintaining the quality while it's manufactured. While we maintain the quality, prices have to be kept under control. Timely delivery should certainly be considered as an important parameter for quality measure and it should change with time.



The presentation started with the need for the User Charter and the top expectations of the customers from the providers. He explained the importance of customer feedback and how it leads to innovation and sustainable development. Standard setting is paramount to make service delivery accountable and efficient. He further described the 7 dimensions of SERVICE Delivery System from the User's Perspective and shared lessons learnt from his various customer centric interventions. He finally proposed the best way forward for professionals to make enterprises profitable is through customer driven quality focus.



Prashant Hoskote

Prashant Hoskote stated that leadership must demonstrate that they value staff opinions and are attentive to their needs and concerns. Leadership should also guide by example and show dedication to the mission of the organization. He further added that staff engagement improves when employees believe there is room for professional growth within their organization and that their achievements are recognized. Staff needs to feel like they have adequate resources to do their jobs properly, including sufficient staffing, maintainable workloads, and access to the tools and supplies needed to perform their jobs well.



Quality Month Competition-2016 Winners' List

		<u> </u>				
S. No.	Winner Name	Institution / Company / Organization Name	S. No.	Winner Name	Institution/Company/ Organization Name	
	Quality Pos	ter Competition	8.	Ritika Srivastava	Banaras Hindu University	
1.	Dr. Rimy Khurana Goyal	NITI AAYOG	9.	Tanima Srivastava	Banaras Hindu University	
2.	Abhishek Parasher	Brij Pvt ITI Gadarwara	10.	Shony Thomas	Pawana Hospital, Pune	
3.	Dr. Tanvi Sood	Fortis Hospital Mohali		Kaizen Implem	entation Competition	
4.	Pooja guleria	USP	1.	R N Raturi	M/s Tata Motors Ltd. Lucknow	
5.	Shubham Sunthankar	St .Vincent's Jr college	2.	Sacchidanand S Gogawale	VIT	
6.	Ms. Prajakta Kulkarni	Envirocare Labs Pvt. Ltd.	3.	Sandeep P	PSG Hospital	
7.	Ms. Manisha Kharade	Envirocare Labs Pvt. Ltd.	4.	Sunil Rana	MSFL.	
8.	Mokshada R Naidu	Envirocare Labs Pvt. Ltd.	5.	Chhanda Sen	Amri Hospitals, Saltlake.	
9.	Surekha Jondhale	Sunshine Hospitals, Hyderabad	6.	Jasjeet Kaur	Chacha Nehru Bal Chikitsalya	
10.	Yashoda Hospital	Yashoda Super Specialty Hospital		Quality Essay	Writing Competition	
	Quality Slo	gan Competition	1.	Ribu Ann Mathew	Tiruvalla Medical Mission	
1.	Krishna Nirmalya Sen	Larsen & Toubro Limited,MMH.	2.	Prasheel Fondekar	Lilavati Hospital And Research Centre	
2.	Aawdh Kishor		3.	Ramakrishna Sistla	Bharat Petroleum Corp Ltd.	
3.	Rajasve Kaushik	Pearl Consulting Services.	4.	Ms. Anjushree lyer	Envirocare Labs Pvt. Ltd	
4.	Remakrishna Sistla	Bharat Petroleum Corporation Limited.	5.	Ms. Anuprita Raichurkar	Envirocare Labs Pvt. Ltd	
5.	Jasjeet Kaur	Chacha Nehru Bal Chikitsalaya.	6.	Shiw Kumar Ojha	Bharat Sanchar Nigam Limited	
6.	Rakhi Srivastava	Nethradhama Superspeciality Eye Hospital.	7.	Dr. Renuka V	Kauvery Hospital , Chennai	
7.	Arti Rajesh	Wipro	8.	Prachi Mishra BabaSaheb B	himRao Ambedkar University, Lucknow	
8.	Sacchidanand S Gogawale	VIT	9.	Akhilesh Chandra	Bank Of India	
9.	Ankit kumar	IIEST, Shibpur	10.	Dilip Kumar Gayen	East West Infosolutions	
10.	Anshuman vishvakarma	Rajkumar Goel Engineering College	11.	Flymol Chacko	Chacha Nehru Bal Chikitsalaya	
11.	Dr. Prabhdeep Singh Chawla	Dept. of Health & Family Welfare, Punjab	12.	Sridhar Thota	USP India (P) Ltd.	
12.	Samridhi Agrawal	6th Class	13.	Satinder Sharma	Max Speciality Films Ltd.	
	Quality Qu	iz Competition		Quality Succes	s Story Competition	
1.	Dr. Rajvi Chandrani	Rajkot Municipal Corporation	1.	Sacchidanand S Gogawale	VIT	
2.	Subbiah Nirmala Chellappa	Pawana Hospital	2.	Sanjeevani Sadashiv Gogawale	Aadishakti Foundation	
3.	Archana K	Pawana Hospital	3.	Debdatta Das	Tata Medical Center	
4.	Sourav Maiti	Institute of Neurosciences Kolkata	4.	Harshita	Guru Nanak Dev Engineering College	
5.	Maneeshkumar Mathangi	Bapatla Engineering college	5.	Dr. Bhavesh Kanabar	Rajkot Municipal Corporation	
6.	Mary k simson	Symbiosis		Dr. Vijay Pandya		
7.	Nishant Panwar	PEC university of Technology Chandigarh Formely Punjab Engineering College.0				

National Scheme for Accreditation of Business Membership Organisations (BMOs)/ Industry Associations /Chambers



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



Benefits - not limited to

- Aligning with international best practices
- Mark of Quality, Credibility and capability
- Reflection of accountability to stakeholders
- Benefits in leveraging funds from National and international agencies
- Opportunities for national / international strategic linkages

'HALLMARK OF QUALITY'

for associations/ industry bodies/ trade bodies/ Councils and Chambers – for enhancing credibility through recognition of 'good governance'; promoted by several ministries and banking institutions

- **Governance**
- Operations
- Services
- **Terformance**

Fee Reimbursement on Fees by SIDBI - for limited period

Apply at: www.nabet.qcin.org/bmo

National Accreditation Board for Education & Training (NABET), Quality Council of India

4A, Ring Road, 6th Floor, ITPI Building, New Delhi-110002

Email: ib.nabet@qcin.org, ceo.nabet@qcin.org, pantvc.nabet@qcin.org

Quality Council of India (QCI) is operating a national scheme for accreditation of Industry Associations/ Business Membership Organisations. This scheme was developed in association with Ministry of Micro, Small & Medium Enterprises (MSME) & GIZ (German Development Corporation) and is aligned to international best practices.

The objective of accreditation is a 'Hallmark for Quality' to establish a standard of organizational competency amongst the BMOs and serve as a reflection of credibility, capability, accountability, transparency and ensuring minimum standards in Quality and performance of the BMOs. The following ministries (as listed below) have promoted the National accreditation scheme.

1	Ministry of Labour & Employment	7	Ministry of Housing & Urban Poverty Alleviation
2	Ministry of Finance	8	Ministry of AYUSH
3	Ministry of Chemicals & Fertilizers	9	Department of Mining & Geology, Ministry of Mines
4	Ministry of Mines	10	DIPP, Ministry of Commerce and Industries
5	Ministry of Science & Technology	11	Ministry of Tourism
6	Ministry of Textiles		

BMOs are graded as Silver, Gold or Diamond based upon four parameters i.e. Governance, Services, Operations & Performance Measurement & Review. Adoption of the BMO accreditation mechanism by all stakeholders will act as a game changer in MSME promotion and development strategy. Banks such as IDBI and SIDBI also have extended lucrative privileges to accredited BMOs. Website: http://nabet.qci.org.in/BMO/.



Swachh Survekshan 2017

According to Census 2011, India's urban population is 377 million or 31% of the total population. These numbers are expected to increase to 600 million by 2031 thus putting greater strain on the urban infrastructure which is already overstretched. As per the United Nations projections, if urbanization continues at the present rate, then 46% of the total population will be in urban regions of India by 2030. The Census 2011 also showed that in 4,041 statutory towns, close to eight million households do not have access to toilets and defecate in the open. Weak sanitation has significant health costs and untreated sewage from cities is the single biggest source of water resource pollution in India. This indicates both the scale of the challenge ahead of the Indian cities and the huge costs incurred from not addressing them.

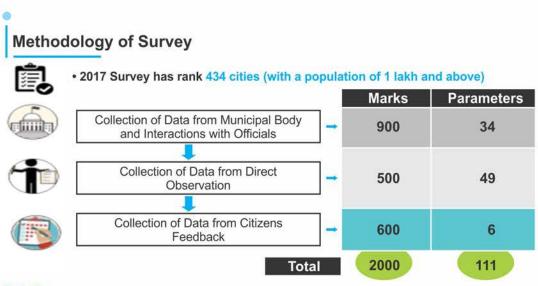
On 2nd October 2014 Hon'ble Prime Minister Shri Narendra Modi launched the 'Swachh Bharat Mission' as a national movement. The 'Mission' laid a roadmap for improving the level of sanitation and cleanliness in the country with a vision to create a Clean India by 2019, the 150th birth year of Mahatma Gandhi. Swachh Bharat Mission in urban areas is focused on 100% scientific management of Solid Waste and building Open Defecation Free towns via construction of Individual Household Toilets, Community and Public Toilets. In order to foster a healthy competition between cities, the Ministry of Usrban Development (MoUD) started the "Swachh Survekshan" survey in 2016 which rated 73 cities across India. The survey was conducted by agency Quality Council of India (QCI), an autonomous body established by Government of India in 1997 for Quality assurance in all spheres of activities including Governance. Last year QCI reviewed the sanitation and hygiene conditions in 73 major cities comprising 40% of India's total urban population, including 52 cities with a population of more than one million and all state capitals. This year also MoUD and QCI are conducting "Swachh Survekshan" 2017 which will rank 500 cities having a population of 1 lakh and above including all state capitals and union territories.

The components covered in this survey are:

- · Solid Waste Management (SWM) including road sweeping, municipal solid waste from residential, commercial areas and from construction & demolition waste.
- · Individual, community and public toilets.
- Open defecation free city/town strategy.
- Information, education and behaviour change communication (IEBC) strategy, ICT based system to enhance Urban Local Body (ULB) operations.

The entire Survekshan is of 2000 marks and the questionnaires are divided into three parts.

Part 1 i.e., Municipal Documentation carries 45% weightage and can fetch a total of 900 marks. It has 5 section with a total of 30 questions. Part 2 i.e. Direct Observation carries 25% weightage and can fetch a total of 500 marks. It is divided into two sections, Independent Validation (Part-2A) and Observation (Part-2B) with a total of 30 questions. Part 3 carries 30% weightage and can fetch a total of 600 marks. It is divided into two sections, Citizens Feedback-(Phone Calls & Social Media) and Swachhta App with a total of 6 questions.





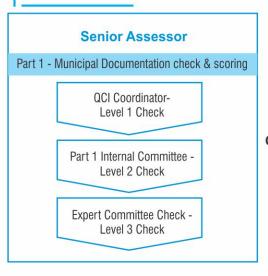
Swachhta Application

The Swachhata-MoUD is the official app of Ministry of Urban Development (MoUD), Government of India. The app enables a citizen to post a civic-related issue (eg. a garbage dump) by clicking a picture and mentioning the landmark of the complaint location. The app captures the location while the picture is being taken which is then forwarded to the concerned city corporation and thereafter assigned to the sanitary inspector of the particular ward. Based on the number of complaints received, resolved, rejected within the SLA (service level agreement) timeframe, the cities are ranked by the app which is available on Swachh City Portal Dashboard.

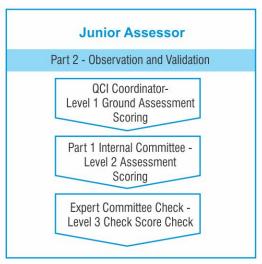
QCI has two Internal Teams to ensure level of quality check.

The Part-1 Internal team re-assess the hard copy received from the municipality and checks all the documents again and comes out with their score. Such that in the end we have three scores at place, Assessor score, Desktop assessment team score and Internal team score. The Part-2 Internal Team re-assess the scores put by assessor and QCI Coordinator in the automated excel and tallies each score by checking pictures from the Data Dump we receive from the App and/or pictures uploaded on drive. Hence, we have three rounds of Scoring and Quality Check implemented in Part-1 and 2 to ensure that there is no laxity in the whole process of Marking and scores.

Survekshan Quality Check







All the data which includes videos and pictures will be present on publically available dashboard, so that there should not be any biasness among cities.

Last year out of 73 cities, Mysore, Chandigarh and Tiruchirapalli topped in the survey, whereas Dhanbad came last. Research states that last year 1 lakh citizens participated in the feedback survey, 110 assessors of agency Quality Council of India (QCI) conducted survey across 73 cities in India, 3,000 + locations assessed on various parameters by on ground assessors, 1168 Public and Community toilets visited and assessed, 876 residential areas visited by the survey team, 20 member 24 x 7 Control room team assigned to ensure uniform assessment.

The objective of the survey is to assess the measures taken by the cities to improve sanitation, present service levels including infrastructure developed and in progress, deployment of men and machines, strategies being followed, efforts to bring about behavioural changes and the overall impact of Swachh Bharat Mission besides promoting a spirit of competition among cities. It will help the ULB in assessing their performance 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 to their own requirements. 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 also fulfills the dream of Gandhiji to make "Clean India".

"Gandhiji ka Sapna Swach Bharat Ho Apna" "Bharat ko Swach Banayenge Gandagi se Azad karwayenge"

Swachh **Bharat Mission**



More than 500 ULBs declared ODF after QCI verification

n 2nd October 2014, the Honourable Prime minister Mr. Narendra Modi made a clarion call to ensure India becomes Open Defecation Free and launched a mega sanitation movement in the country named as Swachh Bharat Mission. The Ministry of Urban Development in conjunction with State Mission

Directorate and Urban Local Bodies has been making unrelenting efforts to achieve the goals set out under the mission.

Swachh Bharat Mission has one of its stated objectives the achievement of Open Defecation Free (ODF) status in all 4041 Urban Local



Bodies(ULB) in India, by October 2019. This is probably the best tribute the country can pay to the Father of our nation, Mahatma Gandhi.

The Census 2011 showed that in 4,041 statutory towns, close to eight million households do not have access to toilets and defecate in the open. This clearly shows that we still have a long way to go in terms of achieving the goal of an ODF Urban India. As we all appreciate, this would be possible not only through creation of infrastructure but also

through a change in attitude and mindset towards safe and sanitary habits, along with mass scale participation from all stakeholders.

The crucial task of verifying the claim of a ULB having attained the ODF status has been mandated to Quality Council of India. In this regard, Quality Council of India follows a stringent and robust two-pronged approach.

The first part of the

process is verification of the Declarations made by the ULB in this regard. A senior surveyor visits the ULB office and checks all the declarations that were obtained during the protocol. These include town head declaration, ward councillor declarations, school declaration, and SHG declarations. Apart from this, QCI also looks at public/community toilets built during the last few years, action plan and result of any survey conducted for construction of toilets, and also campaigns run by the municipality for increasing the awareness about the Swachh Bharat Mission and about Open defection in particular.

The second part of the inspection involves a team of assessors visiting selected slums, residential areas, schools, commercial areas, railway stations/ bus stands/ water bodies. These locations are selected based on several parameters such as population, individual toilet availability, community/ public toilet availability, and coverage of the city. The team also surveys the areas surrounding railway tracks as these are hotspots for open defecation.

The primary challenge in the project is the variable demand from the ULBs of the country which proposes a challenging planning and operational demand. However, with valuable leadership, dedicated efforts and significant experience, the team has and always will be able to execute the demand well within the timeframe.

So far, more than 500 ULBs have been declared ODF after QCI verification.



SMAKI NSUG ILLS PROJECT

he lifeline of a person's employability is majorly dependent on his/her skills and knowledge. By 2020, almost 60 per cent of India's population of 1.3 billion will be in the working age group of 15-59 years. If adequately skilled this demographic dividend could make India a global HR powerhouse. However, with only 2.3% of the Indian workforce that has undergone formal skill training, as compared to 68% in UK and 52% in the US the quantum of challenge faced by the skilling sector is high. As India moves progressively towards becoming a global knowledge economy, it must meet the aspirations of youth and aim

towards skilling them with the best possible standards. The skill development of the working population is currently one of the top priorities for the country.

Skill India Mission an initiative of the Government of India was launched by the Hon'ble Prime Minister Shri Narendra Modi on 15th July 2015 to empower the youth of the country with skillsets that make them more employable and more productive in their work environment. The need is to go beyond imparting technology skills and addressing other gaps faced by the students, including the development aspect, financial training, literacy, communication skills, health issues, etc. In India, and globally, there is an enormous gap between the skills needed by the industry and what academia is producing, resulting in a deep fracture in the talent supply chain. Aligning student aspirations with industry expectations on salaries and job roles; convincing employers to hire the skilled force rather than looking for a cheaper resource is also a challenge.

There is a dire need for a comprehensive ecosystem to impart quality skills to the youth of the country in order to meet global standards. In this regard, it is pertinent to create synergies among the stakeholders of the skills ecosystem, to coordinate and streamline multiple skill development initiatives undertaken by the Government of India. It is imperative to ensure that ground level implementation of skill policies happen at the same speed with which the youth is joining our workforce.

The Ministry of Skill Development & Entrepreneurship (MSDE), Government of India was set up to coordinate skill development efforts across the country. MSDE aims to build an appropriate framework and devising training curriculum. The ministry's most important objective is to revolutionise the workforce by imparting industrial skills with great speed and National Skill Development Corporation (NSDC) a unique Public Private Partnership, under MSDE and the Government of India is responsible for the creation of large institutions that specialise in quality training and development of skills. It acts as a facilitator for Skill

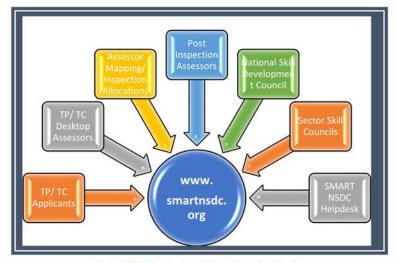


Fig. 1 SMART - single window IT application for multiple stakeholders in the skill ecosystem

Development in India because it provides the required funding to enterprises, companies and organisations that specialise in providing skill training.

With the aim to provide an umbrella framework to all skilling activities being carried out within the country, to align them to common standards and link the skilling with demand centres, the Skill Management & AccReditation of Training Centres (SMART) portal was developed and designed by Quality Council of India (QCI) enabled by MSDE and NSDC.



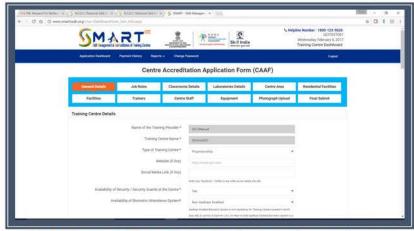


Fig.2 Skill Management & Accreditation of Training Centres (www.smartnsdc.org)

SMART provides a single window application that focusses on the Accreditation, Affiliation and Continuous Monitoring of the Training Centres in the Skill Ecosystem and intends to address the important issues like evaluating skill providers in an objective manner, fostering excellence in Training Centres, enabling trainees to make informed choices with regard to Training Centres etc. SMART facilitates standardized and effective processes with respect to Accreditation, Affiliation, and Continuous Monitoring of the Training Centres, which shall play a significant role in achieving the desired quality standards across various schemes.

As an apex body for quality facilitation and accreditation QCI has been involved in the auditing and assessment of the skill providers. The SMART portal launched on since 2nd October 2016, has already received almost 4000 Training Provider (TP) and 17000 Training Centre (TC) applications of which approximately 3000 TP and 6500 TC have paid and registered. In a span of three months only, 6500 applications have been subjected to a stringent scrutiny (Desktop Assessment) and 2300 have been marked Deemed Ready. With a team of approximately 300 assessors trained in the conduct of Mobile application based assessment of Training Centres, QCI has already completed assessments of more than 1800 centres. Almost 1100 TCs have been recommended for Conditional Accreditation and 3 are Recommended for Accreditation till date.

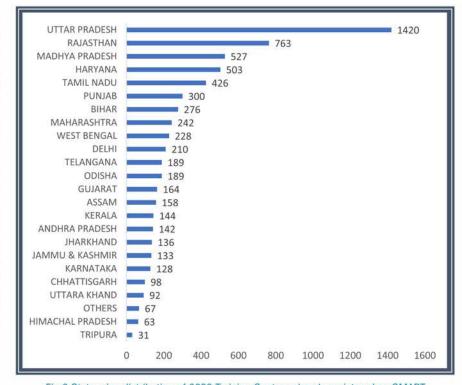


Fig.3 State-wise distribution of 6629 Training Centres already registered on SMART





The scale and nature of skills challenge in India is unprecedented. There is no proven management technique that will deliver a skilled India. Establishing a standardized assessment platform for the skill providers is catalytic step taken by QCI to achieve this goal.



NABET to accredit **SAI Training Centres**

he Sports Authority of India (SAI) was established by the Govt. in 1984 as a Society under the Societies Registration Act, 1860, with the twin objective of broad-basing of sports and to achieve excellence at the national and international level. Over the years, SAI has emerged as a field arm of sports of the Ministry of Youth Affairs & Sports (MYAS).

NABET/QCI has conceived and structured SAI Accreditation Model to offer graded benchmark levels of an institution's performance through a set of standard Facilitator and Outcome parameters focusing on quality for athlete performances. It aims to rate and handhold all Sports Training Centres (STCs) and Regional Centres (RCs) to deliver topquality athletes with world-class facilities.

The RCs and STCs across the country are supervised by different Regional Directors/ Administrators. Many coaches/trainers are involved in improving the performance of players and different facilities are available at these centres. However, there are chances of variations in coaching, training, implementation of plans, performance evaluations, motivation of teams, development of winning instinct, leadership development, maintenance of infrastructure, utilisation of sports science and psychology inputs. Variation in the performance of different centres is evident from time to time and no one factor can be attributed for these variations.

To bring synchronization, fairness, transparency, competency, quality assurance and for strengthening the efforts in all the RCs /STCs it is felt that there is a need for a well-designed assessment and grading criteria. This will help to avoid variations, improve effectiveness, motivate RCs/STCs for continual improvements, make trainings more robust, bring best practices to the fore and benefit all stakeholders.

The aim of this initiative is to help STCs and SAGs evolve and grow by providing them adequate training and knowledge in order to meet the International Standards. The model will sensitise SAI to emphasise on facilities and products that help athletes reach World Class Levels of fitness.

There will be sport-specific assessment parameters for each sport as well as a grading criteria which includes Governance and Management, Infrastructure, Faculty and HR, Training and trainer development, Sports Science consultancy & linkages, SAI Quality Assurance procedures and Overall performance of the Training Centre.

In view of the above it is therefore, a well-designed Assessment Scheme with Grading Model specifying the grading requirements for Training Centres (TCs) is developed by NABET/QCI. The aim is to fulfil the requirements of standard, suitable infrastructure, work environment, TCs governance. Basic inputs for training / coaching, like course curriculum, occupational health & safety conditions, hygiene, availability of competent faculty, Training and its supporting processes, Coaches/trainers and their Performance, capacity building of faculty, quality assurance system, participant feedback, continuous evaluation, proactive and corrective approach is to be developed using this criteria.

Currently, the project has reached the on-field accreditation stage wherein allocated assessors comprising of former athletes/coaches will be covering 18 Sports Training Centres. Following this, NABET/QCI will also be covering the Regional Centres of SAI as well as the National Camps held by SAI.



WINDOW5 DF SOUL

ndia is very diverse in all its aspects, but here I would like to draw your attention to one stream of medical sciences. Charka Samhita is the base for all medicines i.e. Ayurveda. We have a separate chapter in Ayurveda to distinguish between diagnosis, etiology & mode of treatment. Here, we have pulse diagnosis, tongue diagnosis, urine diagnosis, stool diagnosis, voice diagnosis and last but not the least eye diagnosis. I would like to draw an unseen view through eyes to make amazing diagnosis. This wonderful journey of Iris diagnosis is a treat to mind and knowledge.

It gives me immense pleasure to share my knowledge on Iridology with everyone. Iridology is used as a method of diagnosis which helps in understanding health to its maximum.

Your eyes provide a microchip of information about you. The iris represents a communication system capable of handling an amazing quantity of information.

The eyes have been proclaimed throughout the ages as the WINDOWS OF SOUL. One may be surprised to learn that the idea of iridology, if not its practice, is nearly 2,000 years old, possibly even older. The idea is from BIBLE.

By studying Iridology, we can identify our constitutional weakness, for example a tendency towards stomach problems or liver damage or diabetes. Iridology does often not reveal disease and Iridologists do not diagnose. While the iris can reveal some current conditions and stress affecting body systems, it is most useful for prevention and long-term health.

The way the iris imprints information is fascinating. The iris is actually part of the nervous system and its intricate highway of hundreds of thousands of nerve endings and nerve impulses. The nerve fibers in the eye receive their impulses from the rest of the body through the optic nerve, optic thalami and spinal cord.

Iridology can reveal constitutional strengths and weaknesses, inherited strengths and weaknesses, general health levels, nutritional and chemical needs, location of toxins in the body, dietary needs and problems, the quality of the nervous system and internal organs, the response a client has to treatment, acid levels in the body.

There are no two irises exactly alike. In fact, each iris is as individual as a fingerprint. The colour and pattern of iris fibres is an expression of the physical and emotional issues of the three generations behind you which may or not be activated according to the way you eat, drink, think, live and love.

As per Ayurveda, VATA eyes look small, dry with drooping eyelids. Their eyelashes are scanty. The sclera is often dull or dusty. The iris is dark, brown or even black. The eyebrows will be irregular and they may appear

thin as well. Unlike PITTA eyes which are sharp, have a shine and are sensitive towards light; such people tend to have balanced eyebrows and eyelashes. On the contrary, KAPHA eyes have beautiful, moist and big appearance.

This is only about the physical appearance. Here again I would take you to another journey of iris, and its marking.

What if God provided us with a way to decipher our genetic patterns, showing us what needs to be build up in the body and what might need subduing?





Closely observe at your iris in the mirror. Those individual iris fibers are blood vessels with pigments. The threads or the fibers radiate outward from the pupil. The shape of the pupil gives information about the central nervous system and the spine. And where you see spots or openings, there may be a corresponding organ or tissue that needs relief or support. Iris analysis helps to learn about the unity of disease and know better how to care for the body either

through nutrition or through yoga or even if any ailment requires treatment. It also helps in overcoming genetic predispositions.

Iridologist looks into the iris of the eye and sees that the eye is the window

of the body. The healthier the iris, the healthier the body would be.



Iridology is the method of putting light in the dark places. Darkness is associated with disease (evil) and the impure, while the light is associated with health (purity).

Iridologists assess the variations of colour and fibre structure to assess constitutional strength of our physical body, as well as aspects of the personality, which can be influenced by conscious and subliminal emotional patterns. Iridology is not a treatment therapy but rather a diagnostic tool used to assess health and in some instances, detect signs of pathological potential.

The biggest trump of Iris diagnosis lies in the prevention of diseases, since it is possible for the iridologist to detect signs of risk well before the individual presents symptoms, and use means to maintain the homeostasis of the organism, reducing its possibility of falling ill. As such, it acts in health maintenance as well as disease prevention, which is extremely important for the well being of society.



Building Quality Culture: Prerequisite to your Quality Journey

Jyoti Bansal

he first thing, which anybody considers in any organization, is quality. Quality of your work defines you. Whoever you are, whatever you do, you can find the same products and services cheaper somewhere else. But your quality is your signature.

Quality is not an easy thing to achieve. You need to define what is quality. Quality for one organization is not the same as for another. Personally, if I

want to buy a car, I am looking for a vehicle, which will get me from place A to B with minimum cost and problems, and allow me to transport the kind of things I usually transport. This definition of quality will rule out products such as Rolls Royce and Lamborghini (too expensive), but it also excludes a number of tiny electric cars (no space for luggage). There is no common definition, Quality has a pragmatic interpretation as the non-inferiority or superiority of something; it is also defined as fitness for purpose. Quality is a perceptual, conditional, and somewhat subjective attribute

and may be understood differently by different people. Consumers may focus on the specification quality of a product/service, or how it compares to competitors in the marketplace. Producers might measure the conformance quality, or degree to which the product/service was produced correctly. Quality can be defined in terms of price, speed, defects or many other options.

The foundation of any quality improvement is to develop a "quality culture" or mindset within the organization and integrate it throughout the company.

The opinions, beliefs, values and practices of employees regarding quality delineate an organization's quality culture. In all organizations, formal & informal values, philosophies and norms, interact and overlap to create a fabric that refers to a culture.

Companies who have merely tried to imitate quality driven companies without considering their underlying culture have met disastrous results.

A study published in Harvard Business Review based on the survey of more than 60 multinational corporations, and 850 employees in a range of functions and industries shows that many of the traditional strategies used to increase quality-monetary incentives, training, and sharing of best practices, for instance—have little effect. Instead companies that take a grassroot and peer-driven approach develop a culture of quality,

resulting in employees who make fewer mistakes—and the companies spend far less time and money correcting mistakes. Study also pinpointed four factors that drive quality as a cultural value: leadership emphasis, message credibility, peer involvement, and employee ownership of quality issues.

Companies should create a culture in which employees "live" quality in

all their actions-where they are passionate about quality as a personal value rather than simply obeying an edict from the top. A "true culture of quality" as an environment in which employees not only follow quality guidelines but also consistently see others taking qualityfocused actions, hear others talking about quality, and feel quality all around them.

Quality is made by people, which in turn, defines the culture of any organization. Technology, tools, processes & Procedures, documentation may help in someway but it's only the people who really make the quality.

If people do not believe in company, they will let it down. If people are stressed or de-motivated, they will not deliver the quality you may desire. If the company's culture is not conducive to total quality, it must be changed before a quality program can succeed. So, before embarking on a quality journey, it is imperative that the culture of a company is well understood.



Before starting Quality Journey, feedback should be taken from the employees on the following areas:

- · Excellence Orientation
- · Clarity of Objectives
- Focus on Customers
- · Continuous Improvement
- · Training and Development
- · Facts-based Decision Making
- · Rewards and Recognition
- · System Focus
- · Conflicts and how they are handled
- · Degree of Risk Taking
- · Management support of Subordinates





Quality Inputs in School Education

It has been always a matter of concern and discussion regarding Quality In Education (QIE). But unfortunately, no strategy has been worked out. In our vast country there are thousands of schools that provide the education service. Urban schools have their own goals such as to attract the affluent/ elite parents and children and provide them modern facilities and allurements. Semi urban schools try to provide education but feel the brunt of unsuitable/ untrained teachers. Rural schools / remote area schools are the worst affected. However, if we provide the teachers the basic Quality inputs, there can be some improvement.

- 1. Quality- Teacher Trainer: Teachers in the schools must be trained for few basic Quality goals predefined by the intuition. The trainers must introduce them regarding the Quality initiatives, Quality assessments, Quality school audits, Quality as mission.
- 2. SWOT Analysis: SWOT analysis is needed for improvement. It provides us the insight to internal and external factors. It can be done for-Students, Teachers and Management.
- 3. Setting SMART goals: Small steps towards SMART teachers, SMART schools and SMART goals to be taken. The teachers must be introduced about SMART acronym and its use in schools to leverage the education/teaching.
- S- Simple/Specific- Schools/ teachers to make simple, specific and small goals so that it is easy to target.
- M- Measurable- The goal must be measured after it has been achieved.
- A-Achievable- The goal set by the teacher/institution must be achievable and be achieved and also analysis be done.
- R- Realistic- The goal should be realistic. If the goal set is unrealistic, it cannot be achieved. It should be reliable too.
- T- Time bound- A time bound goal should be made. The time set for achieving the goal should provide enough pace to complete / meet it. Time alarms to be set and timeframe to be kept in view and keep it reviewed to complete the goal.

This can easily be done by making SMART goals' sheets for every task that needs improvement.

- 4. PDCA Cycle: It is the next acronym that helps the institution to move towards the Quality. Continual Improvement Programme (CIP) is set in motion if PDCA is used. It is used unknowingly and unplanned by all at all times. If the PDCA is followed in uphill movement way, then the things will be different.
- P- Plan- Teachers need to plan their work in advance. It applies to curriculum plan, lesson plan, class plan etc. The plans such made should

be done keeping SMART goals in view. People don't plan to fail but fail to

D-Do- Do the work as planned. The curriculum, lesson, class plan to be worked out properly.

C-Check- The plan planned, work done if it is going according to the plan or there is deviation. It should apply 'Walk the Talk', 'Work on Plan' for better results.

A- Action/Analysis- Take action on the checked plan. See if the 3 steps have been fulfilled properly/ it needs moderation. Analyse the pros and cons. Does it affect the goal? If it gives '+' effect, then standardise it. And continue the 2nd cycle of PDCA, then 3rd,4th and so on till the Quality landmark is achieved.

5. Quality in Pedagogy

- a) A Classroom Observation Scale (COS) to be practised in classes and be observed by the mentors. It is a standard approach prerequisite of Quality pedagogy for all classes as it integrates learners more than the teacher involvement.
- b) Student mapping is essential for understanding the learning gaps/ achievement gaps of learners.
- c) Bloom's Taxonomy that is not known to most teachers/ practitioners the utility of same falls at the back. It should be interwoven with the TLP-- Teaching Learning Process and evaluation.
- d) Rubrics for all activities (scholastic and Co- scholastic), tasks, assignments and projects be designed by the teacher for learner must be in habit of a SMART teacher. Having SMART board and SMART people does not suffice.
- e) CCE, the continuous comprehensive evaluation, must be practised in schools honestly for holistic development. Most teachers take it as a burden and have a casual approach/attitude towards it.
- f) Feedback to students How to give feedback to students is the crux of the TLP. John Hette's suggestion to be used for Quality In Education.
- 6. Mandatory accreditation: In each city/town we must have 10% of the school accredited (each year) . It will ensure the path to Quality In Education.

In my view if the above Quality Inputs are used as Quality Ingredients in our routine classes, it is obvious that the momentum will set in. It takes time to bring Quality. It is conscious and continuous effort by all stakeholders to achieve it because Quality speaks and it has no language.



Dilip Kumar Gayen

Basic Factors and Scorecard for Measurement of the **Organization Performance and Reduction on Process Loss**

Abstract: This Study is framed for the purpose of developing suitable parameters for measuring the Efficiency and Performance of an Organization which various losses for Service and Manufacturing Industries. Efficiency depends on how much Inputs are used i.e. effective utilization of Resources through Quality, Process and Administration & Managerial efficiency to achieve the required Output

with Customer's Satisfaction with a method i.e. proper controlling and Monitoring system.

Introduction

Improvement in Efficiency always focused on the Reduction of Losses, Wastage i.e. Non-value additions in the Process & Operations which improves Productivity and Efficiency of an organization. It has impact on the cost of production. P(Profit) = Sales Price - Cost(Value added + Non Value added). It has positive impact on Profit. Performance Scorecard also emphasizes the scores of Business and

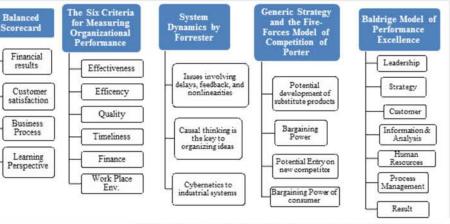
Customer's Satisfaction with Quality or customer drive strategy, Price, Delivery and after Sales Services. Development of the Standard Scorecard is based on a Business Model which represents true leadership of an organization focusing on continuous expansion and steady business development.

Newly developed scorecard designed on improvement areas like Employee satisfaction, organization leadership & Business environment relating to Managerial Competency, Business Growth and Customer's satisfaction, inter efficiency of process with external factors related to the business with the Focus of reducing all types of losses. Specialty of this new designed scorecard is its review is Year-wise or Quarter-wise by data collection & data analysis.

Purpose of this Scorecard

The Scorecard is a management tool that provides stakeholders with a comprehensive measure of how the organization is progressing towards the achievement of its strategic goals with reducing all non-value additions.

In this study the perspectives are preferred to cover the Profit/financial result, Quality, Process & Operation, Market growth & constraints, Customer and Human Resources and Work culture of an Organization i.e.



3600 approach. For Developing the Scorecard and parameters we have followed the broad areas of Business, Customer, Employee, Culture, Technology and Leadership. Through this scorecard organization could design the Performance base Incentive Scheme which will be allocable to the Employees. Use of Scorecard should be multi-purpose and essential tools for the Management.

Various Studies on Scorecard and Organization Efficiency

Study Methodology

The Methodology is applied to develop the Model is called exploratory research (getting more information on a topic) and comparative research, employing well known and accepted theories and principles with study of some selected units. Process used for this Study are Study and research areas. Literature review & reference collection. Assessment of current status of the topic chosen, Study and Data collection on the Research Subject, Validation and its Testing of the Parameters, Study exploration and Data analysis, Interpretation of result



and corrective action on it.

Study Outcome on the Factors of the New Developed Scorecard

Factors are defined after study of the various Models, Theories and Researches. The Objectives of the Factors are the Developmental and Sustenance i.e. continuous the Growth and Progress of the organization, Resources - Inputs & Manpower, Maintenance - Control and Monitoring of the Organization. The no. of sub factors or parameters is decided depending on the importance of the Factors with all important areas related to the Factors. Name Factors for Measurement of the Organization Performance and Efficiency Scorecard

The above parameters are developed as a result of long term experiences on engagement on improvements of various Industries in these related areas, in depth process study, from publications Article and Literatures and guidance from Industrial Experts and Management Gurus.

Formulas of Calculation of the Factors' Performance in the Model

Y = F(X1 + X1 + ... + X8)

Y = Output or Total Score Achieved, X = Factor of Assessment, Input Factors Performance (Y) i.e. Output is the Combination / result of different Inputs of Internal Improvements.

Total Performance Score = \sum Factor X1 + \sum Factor X2 + \sum Factor X3 + Σ Factor X4 + Σ Factor X5 + Σ Factor X6 + Σ Factor X7 + Σ Factor X8

Details of the Total Factors Scores

Factor X1 (Corporate Leadership) = \sum (C1+C2+C3+C4+C5); Factor X2 (Employee Development) = Σ (ED1+ ED2+ ED3+ ED4+ ED5); Factor X3 (Organizational Work Culture) = \sum (OC1+ OC2+ OC3+ 0C4+ 0C5+ 0C6+ 0C7); Factor X4 (SWOT Analysis) = Σ (SW1 + SW2 + SW3 + SW4); Factor X5 (Financial Strength) = \sum (F1 + F2 + F3+F4 + F5); Factor X6 (Effectiveness of Products and Services) = ∑(P1+ P2+ P3+ P4+ P5); Factor X7 (Evaluation of Production, Process, Plant and Machinery) = $\sum (E1+E2+E3+E4+E5+E6+$ E7+ E8+ E9 + E10); Factor X8 (Corporate Strategy and Managerial Efficiency) = \sum (CS1+CS2+CS3+CS4+CS5+CS6)

Name and Description of Factors for the Performance and Efficiency Measurement which are derived from the Study

SI. No.	FACTORS	Factors of Measurement	Measurement areas	Parameter Code	Clarifications (Purpose/ Importance of this Measurement)	Measurement	Agency/ Group for Calculation with Source of Data and Information												
							New Business Initiatives	C1	Rate of Growth and it's Progress of the Organization	Old / New Business areas or Additions of New Profitable Products or Services in the Calculative units	Internal PMG Group / Department								
		lership	Customer's Satisfaction Level / Index	C2	Feedback of the Products and Services with Improvement in Business or Operation or Activities	3rd Party Survey Result of Customer's Feedback (may be an Internal Process with Feedback Formulation)	From any External Agency												
1	Factor - X1	e Lead	Employee Satisfaction Index	С3	Employee Satisfaction about the Organization and their Work	3rd Party or Internal Assessment Procedures	Third Party Assessment/ By Consultant												
	Fact	Corporate Leadership	Business/ Operational Process Management	C4	Strategy about Business/ Operational Improvements / Development of System	Increase in the Volume of the Business/ Activities (in comparison with the Market Growth). BPM - Business Process Management	Jointly Internal Group / Department												
				Corporate/ Organizational Values	C5	Assessment of Brand Value with Level of Brand in Comparison with Competitor	Promotion of the Corporate Brand Name. Social Responsibility	External Agency											
	Factor - X2		Factor - X2 Employee Development		Employees Performance Level	ED1	Most Important Calculation for Employee utilization with Payment	Increase in the EPI - Employee Performance Index	Internal Assessment with PMG										
		Factor - A2 Employee Developmen		Motivation	ED2	For Better Performance of the Employee	Level of Motivation	External Agency with PMG											
2				Potentiality and Competency of Employee	ED3	To Assess and Improve the Performance – Departmental and Individual	Level of Competency	External Agency with PMG											
				Learning and Training perspective	ED4	For Better Performance and Improve Competency	Learning and Training Initiatives, Competency Based Training to the Employees	Internal Departments											
			Employee Development Policy	ED5	For Better work Culture	Improve in the HRD Climate	HR Department												
				2000	10000									Employer Employee Relationship	OC1	Better Performance and Team Building	Workers councils, Employee shareholders, Autonomous work groups, Team working etc.	Top Management with PMG	
	Factor - X3	lture	Internal Communication System	OC2	Better Performance and Execution	Development in the Internal Communication and Feedback	HR Department												
		Factor - A.5 ational Work Cu	ational Work Cu	ational Work Cu	ractor - A3 Organizational Work Culture	, ē	k Cu	Ę C .	k Cu	Ç.	k Cu	k Cu	k Cu	k Cu	Quality Management Initiative	ОС3	Quality in Output and Execution	Application in QMS	External Agency with PMG
3						Worker's/ Staff's Participation in Management	OC4	Better Feedback about the Execution and Problems, Improve in Performance in Working with Better Improvement Planning and Strategy	Organization-wise Developmental Feedback. Like KAISEN scheme etc. Initiated by the Org.	Top Management with PMG									
		aniz	Knowledge Management	OC5	Better Employee Motivation	Career Planning with Policy under HR Policy	HR Department												
		Org	Performance Measurement System	OC6	Organizational Growth and Performance Monitoring	Structured PMS in the ERP or in the Organization System	External Agency with PMG												
			Incentive and Award Scheme	OC7	Employee Motivation	Performance Linked Incentive and / or Employee Reward Scheme	HR Department												



SI. No.	FACTORS	Factors of Measurement	Measurement areas	Parameter Code	Clarifications (Purpose/ Importance of this Measurement)	Measurement	Agency/ Group for Calculation with Source of Data and Information								
4	Factor - X4	SWOT Analysis	Advantage of the Sector, Economies of Scale, Product Advantage /Disadvantage etc.	sw	Better Business Planning as per the Strategy, Vision and Mission	SWOT Analysis of the Business and Industry and relates with Action Plan	External Agency with PMG								
		ff.	Analysis of P/L Account and Balance Sheet of Min. last 5 years / or available	F1	Improvement in Business in Competitiveness with Advantage in Economy	Business Prospect Analysis. New areas of Investment etc.	Fin. & Accounts Department								
	-X5	Financial Strength	Ratio Analysis	F2	Assessment of Return from Shareholder's Money	ROI from the Investment	Fin. & Accounts Department								
5	Factor - X5	cial 9	Market Value and Market Capitalization	F3	Growth and Trend in the Market	Trend of Market Value of the Shares etc.	Fin. & Accounts Department								
	<u>~</u>	Final	Operating Ratio	F4	Control, Monitor and Reduction in Operation Cost	Net Profit from Business/ Sales or Revenue	Fin. & Accounts Department								
			Gross Profit Ratio	F5	Increase in Gross Profit in Comparison with Sales	Gross profit to Sales	Fin. & Accounts Department								
		rvices	Market Survey and Analysis about the Products and Services	P1	Feedback for Scope of Improvement in the Product's and Services	Structured Market Survey with Trend Analysis	External Agency with PMG								
	9X -	Effective Products and Services	Customer/ Consumers' Satisfaction, Expectation and feedback	P2	Improve in Customer's Choice	Periodic Customer's Product's and Service's Feedback and Suggestions	External Agency with PMG								
6	Factor - X6	oque:	Product Diversification	Р3	Better Products launch in the Market with Better Option of the Products	Initiatives on Product Diversifications and Value additions	Business Dev./ Marketing Dept.								
	E	ive Pr	Customer's awareness	P4	Better Concept and wrathfulness about the Products and Organization	Product awareness among the customers	Internal Group - Business Dev./ Marketing Dept.								
		Effecti	Analysis of the Customer/ Consumers' Behavior	P5	Purpose of Customer's choice of your Products and loyalty (if any)	Customer's Attitude to the Product's / Services	Internal Group - Business Dev./ Marketing Dept. with PMG								
		of Production, Process, Quality, Plant & Machinery		Adoption of new Technology	E1	Improve Competitiveness, Efficiency, Capacity and More Production as per the Customers' Demand	Technological - Change, Innovations and Adoption in the Organization	Production Department with PMG							
			Development of the Process and Methods	E2	Use Value Engineering and Process Modifications	Process Modification /Reduction in VA, BVA and NVA	External Agency with PMG								
			Quality and Inspection Procedures	Е3	For Quality Improvement and Customer's Satisfaction	Quality Improvement Procedures. No. of QC Tools are Implemented. Existing PPM level - KANBAN	Quality Department with PMG								
			Process Capacity Study	E4	For Consistency in Quality and Output	Process Capacity Estimation Tools Application and Data Collection for Analysis. Use of Statistical Analysis Tools	Production/ Quality Department with PMG								
7	Factor - X7	rocess, Q	Rate of Reduction of Production losses and Production Cost	E5	More Reduction in Losses and Improvement in Efficiency	Reduction in the Wastages and Losses. Reduction in Cost of Production	Production/ Operation/ Quality Dept, with External Agency and PMG								
	Fa	ıction, Pı	Process Modification and Process Reengineering	E6	Improve in Process Capacity and Reduction in Cost and Better Delivery to the Customer	Process Modification and Re-engineering/ BPR etc.	External Agency with PMG								
		Evaluation of Produ					Improvement in Productivity	E7	Productivity and Performance Improvement and Reduction in Cost	Productivity and Performance Improvement, Production Norms etc.	Production Department with PMG				
		Evalı	Maintenance of Plant and Machinery	E9	Follow up and Improvement of the Plant Efficiency	Plant Efficiency Level and OEE & OPE	Maintenance with PMG								
		6.F7V)	Improvement Culture in the Plant - Innovations	E10	Reduction Process Loss and Shop Floor Improvement	No. of Innovations by the Workers and Team Planned Implementation of the Effective Improvements Tools and Techniques like 5S, Kaizen, Tools of 7QC Tools	Production & Maintenance with PMG								
			Future Growth plan	CS1	Planned Investment and Growth Plan	Market Based Growth Planning	Top Management								
	Spring I	y and	Org. Quality Policy	CS2	Improvement in Quality in Work and Output	Application of TQM - Total Quality Management	Top Management with External Agency								
6	8X - J	Corporate Strategy and Managerial Efficiency	Re-Engineering Policy	CS3	Process Improvement in Capacity and Utilization	BPM, Internal Business Process	Top Management with External Agency								
8	Factor - X8	rate S	Org. Efficiency Improvement	CS4	For Sustain in Business and Stability	Improve in Effectiveness and Efficiency	Top Management with External Agency								
		orpo	Learning	CS5	Innovations and Better Value Addition	Make the Org. As an Learning Organization	Top Management								
		0	Planned HR Interventions	CS6	Better HR Practices for Employee Performance and Efficiency	No. of Planned Interventions	Top Management with HR Department								

Note: The Above Mentioned areas could be customized before use for any Organization



CONCLUSION

The best use of Scorecard for an organization would on many dimensions, these are better controlling and monitoring of the departmental activities and performance. It is for better and efficient utilization of internal resources like manpower, plant & machineries, input materials etc. Implementation of Scorecard is for periodic assessment of your system which is for competitiveness and sustainability of the organization as best performer. It focuses on reduction losses & wastages i.e. in non-value added activities in the process which could not be identified easily; low score in the assessment indicates management about the process loss which has direct impact on profit. It is a structures management information system of an organization which connects other sections of department's performance of their MIS. This Scorecard requires various data, records and use of statistical tools to analyze which enables the management for review, parameters trend, retrieve, process control i.e. process control - SPC for sustainability. This Scorecard also includes the use Technical tools like QC, Kaizen, 6S, QM, TQM, FTA etc. for system improvement and practice which could make an organization world class performer.

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Implementation of **Good Agricultural Practices - A Foundation for Ensuring Food Safety**

Sohrab

1. INTRODUCTION

Agriculture is the mainstay of Indian economy. It feeds the nation and provides raw material for food industry. It is now at threshold of taking initiative towards commercialization. To make this effort effective modern techniques and technologies are inducted in Indian agriculture. It is now ushering in a new era for agriculture to compete with global players. But the big challenge today is breaking the link between economic growth and adverse effect of current agriculture practices (See Box 01).

With the advent of World Trade Organization (WTO) in 1995 setting a global trade regime for free flow of agriculture produce. This got further momentum by Agreement on Agriculture (AoA) under WTO exerting pressure for opening up of Indian agriculture to global completion. Though it imposes challenges but also offers tremendous opportunities for Indian agriculture to play an important role in the international markets. The challenge of global markets is nowhere greater than in the primary food sector.

Although the green revolution greatly benefited, the country had to pay a heavy price for uncontrolled used of chemical fertilizers, irrigation water and pest control products leading to adverse environment impact, degradation and increased salinity in soil, deforestation and depletion of water resources. This has also increased hazard for human health and safety with foods having high levels of pesticide residue.

There is therefore a need to develop a well thought-out strategy to modify the current agricultural practices to attain a more sustainable agriculture. This is being shaped up through implementation of Good Agricultural Practices (GAP), which provides a structured methodology to harness the new technology without its adverse impact on environment and health and safety of people.

Application of GAP ensures regulatory compliance and food safety to the consumer. This helps in conservation of resources, judicious utilization of resources and maximization of yield, thus making agriculture produce more competitive by exploiting vast fertile land with diverge agroclimatic conditions and low cost of labour to boost export.

In addition to improving the yield and safety of the products, it has environmental and social dimensions. GAP promotes eco-friendly agriculture by preventing degradation of soil, maintains biodiversity and ensures optimum utilization of water resources. Its social dimension would also be to protect workers' health and safety. It is therefore a social responsibility of all stakeholders to implement GAP for maximizing productivity, increasing quality and food safety and minimizing negative impact on environment.

ADVERSE EFFECT OF CURRENT AGRICULTURE PRACTICES

- · Indiscriminate use of chemical fertilizers
- · Use of excessive water leading to depletion of water resources
- · Irrational use of pesticides leading to high pesticide residues in the produce
- · Contamination of water bodies and underground water
- Degradation of soil quality particularly Micronutrients
- · Soil degradation and erosion due to lack of soil conservation measures
- Low productivity and low quality
- loss of up to 35 percent of horticultural produce during harvesting and postharvest operations
- · Risk to health and safety of agricultural farm workers

2. EXCESSIVE AND INDISCRIMINATE USE OF PESTICIDES

Excessive and indiscriminate use of pesticides leaves high levels of pesticide residues in the produce, which increases hazard for the health of consumers. This may in the short-term increase productivity, but in the long-term this practice not only leave high levels of pesticide residues in the produce affecting health and safety of consumers but also leave negative impact of environment. There is an international cry to reduce pesticide residues in primary raw materials and food products. Food safety has become paramount concern in the international trade of

Control of pesticide residues is an important element of GAP by judicious utilization of pesticides and implementing Integrated Pest management Practices. But there is no effective mechanism at present for monitoring pesticide application at the farm level due to inadequate infrastructure particularly testing facilities of pesticide residues as per international standards. It is therefore necessary to develop a national monitoring mechanism for pesticide residues to control them in the farm produce.

GAP requires a system whereby each pesticide application is recorded with their doses and timings and names of pesticides applied. It also recommends that growers maintain an approved pesticides list with both the product name and active ingredient and use only those approved pesticides

3. EXCESSIVE USE OF FERTILIZERS

A scientific agriculture demands a decision making process based on specific crop requirements, available nutrients in the soil and available



nutrients from farm manure and crop residues. Required doses and correct application not only optimize use fertilizers but also avoid degradation of soils and the environment by excessive use of chemical fertilizers.

GAP requires application of fertilizers in optimum doses and timed to maximize the efficacy and uptake by target crops. It recommends application of fertilizers (organic or inorganic) given by competent authority. All applications of soil and foliar fertilizers, both organic and inorganic, are recorded. Besides Gap helps in harnessing environment nitrogen by proper crop rotation alternating leguminous and non leguminous crops and nitrogen fixing azotobacter.

It requires maintenance of inventory of inorganic fertilizer and record of use. Similarly it provides for storage of inorganic fertilizers in an appropriate manner, which reduces the risk of contamination of watercourses. It bans the use of human sewage on the farm as source of nutrients.

A study on implementation of GAP standards conducted by FICCI has revealed 30-40 percent savings in the inputs-pesticides, fertilizers and water.

4. SOIL CONSERVATION AND SOIL MANAGEMENT

Soil is the basis of all agricultural production, and the conservation and improvement of this valuable resource is essential. Good soil husbandry ensures long-term fertility of soil, aids yield and profitability.

GAP advocates good agronomic practices and application of field cultivation techniques used to reduce the possibility of soil erosion such as mulching and/or cross line techniques on slopes and/or drains and/or sowing grass or green fertilizers, trees and bushes on borders of sites, etc. Cultivation techniques such as proper crop rotation and mix cropping used that improve or maintain soil structure, and to avoid soil compaction and reduce the possibility of soil erosion.

5. IRRIGATION AND WATER CONSERVATION

Water is a scarce natural resource and irrigation should be triggered by appropriate forecasting of the need for specific crops and by use of technology and equipment allowing for efficient use of irrigation water such as drip irrigation, sprinkler irrigation etc.

GAP requires calculated use of water based on scientific methods of prediction of the water requirement of the crop and use the method of irrigation in light of water conservation. There should be a water management plan to optimize water usage and reduce waste and record maintained for irrigation/fertigation water usage.

6. INTEGRATED PEST MANAGEMENT (IPM)

"IPM is a sustainable approach to managing pests by combining biological, cultural, mechanical and chemical tools in a way that minimizes economic, health and environmental risks".

IPM involves a careful consideration of all available pest control techniques, pest population and the subsequent integration of appropriate measures that discourage the development of pest populations, and keeps plant protection products and other interventions to the levels that are economically justified and reduce residues in crops to minimize risks to human health and the environment.

Gap builds IPM systems on sound scientific basis requiring evidence from producers of implementation of activities in the following manner:

- a) Prevention-how pests are prevented from entering the farm,
- b) Observation and Monitoring- what are observation and monitoring techniques used at the farm and
- c) Intervention- how intervention activities performed without having impact of safety and environment. Where plant protection products (pesticides) have been used objective must be achieved with the appropriate minimum input.

7. PLANT PROTECTION PRODUCTS STORAGE AND HANDLING

Where pest attack adversely affect the economic value of a crop, it may be necessary to intervene with specific pest control methods, including plant protection products. In such cases correct use, handling and storage of plant protection products becomes essential.

Producers should only use plant protection products that are registered and approved for the target crop. All the plant protection product applications are recorded including the crop name and/or variety with justification

The Plant Protection Product should be stored and handled in such a way that it does not lead to contamination of soil, water sources and environment. Obsolete plant protection products are securely maintained and identified and disposed of by authorized or approved channels.

Empty Plant Protection Product Containers should be disposed of in a manner that avoids exposure to humans, contamination of the environment. When empty containers rinsed either via the use of an integrated pressure-rinsing device on the application equipment, or at least three times with water, the rinsate from empty containers returned to the application equipment tank and empty containers kept secure until disposal.

8. PRE -HARVEST APPLICATION OF PESTICIDES

GAP requires the producer to demonstrate that all pre-harvest intervals have been observed for plant protection products applied to the crops, through the use of clear documented procedures such as plant protection product application records and crop harvest dates from treated locations. Specifically in continuous harvesting situations, there are systems in place in the field e.g. warning signs, time of application etc. to ensure compliance to registered pre-harvest intervals

9. HARVESING OF CROPS

Harvest management of crops is important for better recovery of yield and avoidance of waste. It is an important stage where proper norms need to be applied for judging maturity of crops and for risk free handling such as proper hygienic practices as most of the produce either goes for direct consumption or for processing by the food industry.

GAP requires that hygiene instructions and procedures for handling produce to avoid contamination of the product are followed. This includes personal hygiene, tools and container hygiene, cleanliness transport vehicles and toilet facilities. It also requires documented inspection process in place to ensure compliance with defined quality and food safety criteria and provide protection from contamination.



10. POST-HARVEST TREATMENTS

Post harvest treatment of produce with chemicals and pesticides is an important area of produce protection and food safety. There are admissible practices such as use of post-harvest biocides, waxes and plant protection products and there are undesirable practices such as direct application of pesticide in stored products.

GAP requires that all the biocides, waxes and plant protection products used for post harvest protection of the harvested crop should officially be registered or permitted by the appropriate governmental agency in the country. The documented postharvest biocide, wax and crop protection product application records need to be maintained including the technically responsible person for the harvested crop handling process to demonstrate competence and knowledge with regard to the application of biocides, waxes and plant protection products preferably supported by nationally recognized certificates or formal training.

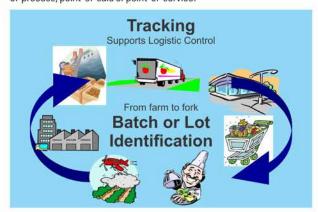
Records to be maintained on the following:

- a) The lot or batch of harvested crop treated,
- b) Geographical area, the name or reference of the farm or harvested crop handling site,
- c) Exact dates (day/month/year) of the applications,
- d) Type of treatment used for product application (spraying, drenching, gassing etc.),
- e) Trade name of the products applied,
- f) Amount of product applied in weight or volume per litre of water or other carrier medium,
- g) Name of the operator who has applied,
- h) Common name of the pest, disease to be treated.

There are chemicals used for ripening produce such as mango and bananas. These are often non permitted chemicals and are harmful to health.

11. TRACEABILITY

Traceability is now a very important aspect of international trade of agricultural produce. In defining traceability, it is important to distinguish between the terms "tracking" and "tracing" Tracking is the capability to follow a path of a specified unit and/or batch of product through the supply chain as it moves between organizations towards the final pointof-process, point-of-sale or point-of-service.



Tracing is the capability to identify the origin, movements and relevant associated information of a particular unit and/or batch of product located within the supply chain by reference to records held upstream...



In the event of any thing going wrong or product is implicated on food safety reasons, producer should be able to find out where things have gone wrong and if necessary recall the product.

12. WORKERS HEALTH, SAFETY AND WELFARE

People are key to the safe and efficient operation of any farm. Farm staff and contractors as well as producers themselves stand for the quality of the produce and for environmental protection. Education and training will help progress towards sustainability and build on social capital.

GAP ensures safe practice in the work place and that all workers understand, and are competent to perform their duties; are provided with proper equipment to allow them to work safely; and that, in the event of accidents, proper and timely assistance can be obtained.

13. PROTECTION OF ENVIRONMENT

Farming and environment are inseparably linked. Managing wildlife and landscape is of great importance; enhancement of species as well as structural diversity of land and landscape features will benefit the abundance and diversity of flora and fauna.

GAP requires a written action plan which aims to enhance habitats and increase biodiversity on the farm. This includes knowledge of IPM practices, of nutrient use of crops, conservation sites. It emphasizes the growth of healthy crops with the least possible disruption of agroecosystems and encourages natural pest control mechanisms.

CONCLUSIONS

Agriculture has an impact of environment and well being of society. Therefore Good Agricultural Practices must:

- a) Ensure judicious use of plant protection chemicals,
- b) Encourage biological control of pests and diseases,
- c) Ensure judicious use of chemical fertilizers,
- d) Encourage use of organic manures, bio-fertilizers,
- e) Introduce good agronomic practices to maintain fertility regime of soil and prevent soil degradation,
- f) Encourage good soil conservation practices to preserve surface soil,
- g) Maintain biodiversity at farm to preserve ecosystem



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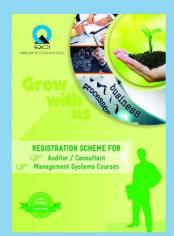
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