

# **Presentation on**

## **“Role of PSUs for Smart City Ecosystem”**

By  
T.S. Rajput  
Dy. General Manager  
National Small Industries Corporation (NSIC)  
Technical Services Centre  
A-1, Industrial Estate, Aligarh

# Role of PSUs for Smart City Ecosystem



**एन एस आई सी**  
**NSIC**  
ISO 9001 : 2008

**NSIC - National Small Industries Corporation**  
a Public Sector Enterprise under MSME, has a mission of promoting, aiding and fostering the growth of micro, small and medium enterprises in the country.

# NSIC - National Small Industries Corporation

NSIC, a Public Sector Enterprise under MSME, has a mission of promoting, aiding and fostering the growth of micro, small and medium enterprises in the country. NSIC operates through countrywide network of offices and Technical Centres . It offers a package of services for marketing support, credit support, technology support and other support services.

NSIC-Technical Services Centre , Aligarh is engaged in providing Technical as well as Training support to Industries and unemployed youth for their career growth by providing Skill Development through Training programs and providing jobs through Job Melas.

## **Introduction:**

Smart city services have an inevitable role in addressing the complexity of modern city operation.

- Smart transport,
- smart parking,
- smart energy,
- smart water

and many others are examples of vertical smart city systems that are mainly concerned with its particular domain. Realizing the full promise of smart city will require interoperability among those systems and data fusion between heterogeneous components from different domains.

## The Concept of “Smart City”

Cities and urban areas of today are complex ecosystems, where ensuring and quality of life is an important concern. In such urban environments, people, public authorities experience specific needs and demands regarding domains such as healthcare, media, energy and the environment, safety, and public services. These enabled and facilitated by Internet broadband infrastructures.

## **The Concept of “Smart City” (Cont.)**

Therefore, cities and urban environments are facing challenges to maintain and upgrade the required infrastructure participative innovation processes to jointly create the innovative applications the demands of their citizens. In this context, cities and urban areas represent a critical mass when it comes to shaping the demand for advanced Internet scale open and user driven innovation environments.

## Ecosystem- An Introduction:

An ecosystem is made up of all of the living and nonliving things in an area. This includes all of the plants, animals, and other living things that make up the communities of life in an area. An ecosystem also includes nonliving materials—for example, water, rocks, soil, and sand. A swamp, a prairie, an ocean, and a forest are examples of ecosystems. The Sun is the main source of energy for nearly all ecosystems.

An ecosystem usually contains many different kinds of life. A grassland, for example,...

# My Experience

## **The Concept of “Smart City”** **Cont.**

Now I want to share my experience when I had a opportunity to visit Singapore in April 1999 as I had been selected by Asian Productivity Organization (APO) Japan and had attended two weeks training program on Quality, Cost and Delivery (QCD) at Singapore Standard and Productivity organization. During my stay in Singapore, I met with certain wonderful experiences as listed below:



# The Concept of “Smart City” **my experience**

1. The cleaning in Singapore as a whole country is top class.
2. Every day morning the cleaning staffs clean the road sides and streets and collect garbage in gunny bags and keep these gunny bags in one place. After some time a municipal vehicle comes and collects these bags so that the garbage does not litter on the road again.
3. We have not seen any bagger in Singapore, there is heavy punishment on baggers ( physical as well as Financial).

# The Concept of “Smart City” **my experience**

4. Proper lighting and sanitary systems are there.

5. Proper infrastructure, public transports and parking are there.

6. Sufficient greenery and plantation are present.

7. The utility ( Electricity, sanitary and water supply) department of Singapore is ISO 9000 Quality Management Systems certified.

8. The building and roads construction work going on with full safety precautions.

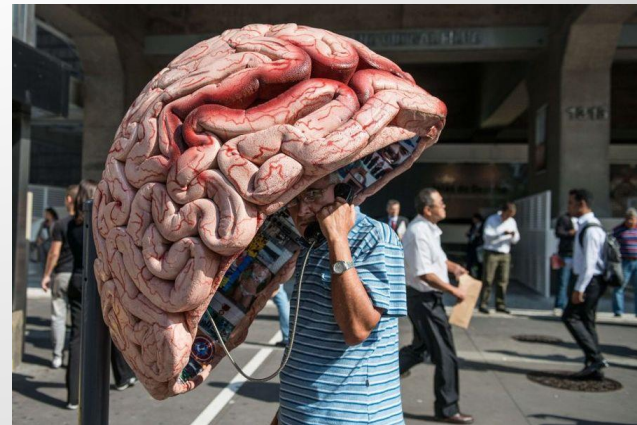
9. Nobody spits and throws garbage on the roads.

Moreover, the people are more careful and have civic sense to keep the city clean and green.

## Separate Dust bins for Plastic, paper & food items in Germany



## Public Telephone Booths in Brazil



Public utility

# Foot paths in Singapore



Foot paths in Singapore



# All Govt. officials and Citizens clean the city on Alternate Saturday Voluntarily



## Foot paths cleaning in Singapore

# **Role of PSUs for Smart City Ecosystem-**

First of all I want to introduce about PSUs

1. The 181 scheduled CPSEs, i.e.

- 64 Schedule 'A',
- 68 Schedule 'B',
- 45 Schedule 'C' and
- 4 Schedule 'D' CPSE

The following PSUs are having their offices in Aligarh

1. National Small Industries Corporation
2. Indian Oil Corporation
3. New India Assurance Company
4. Bharat Petroleum Corporation Limited
5. Bharat Sanchar Nigam Limited (BSNL)

## Role of PSUs for Smart City Ecosystem-

The following PSUs are having their offices in Aligarh

6. Food Corporation of India
7. Nuclear Power Corporation of India
8. Oriental Insurance Company
9. United India Insurance Company
10. Banks etc.

## Corporate Social Responsibility:

Under the Companies Act, 2013, certain class of profitable entities are required to shell out at least two per cent of their three-year annual average net profit towards **Corporate Social Responsibility (CSR)** activities in a particular fiscal year.

# **Objectives of CSR Policy**

**The broad objectives of the CSR Policy of the Corporation would be as follows:-**

- Corporate Social Responsibility is a company's commitment to its stakeholders to conduct business in an economically, socially, and environmentally sustainable manner that is transparent and ethical;**
- Social Responsibility initiatives would be used for social value creation and adoption of "Shared Value Approach";**



- **The emphasis would be placed on the scalability of the projects in terms of their size and impact, rather than on their numbers.**
- **Activities which are selected under CSR as far as possible, will be implemented in a project mode;**
- **The emphasis would be on capacity building, empowerment of communities, inclusive socio-economic growth, environment protection, promotion of green and energy efficient technologies, development of backward regions, and upliftment of the marginalized and under-privileged sections of the society;**

- **Provide training - vocational education and skill development training with a focus on the under privileged and physically challenged persons;**
- **Comprehensive and integrated community development;**
- **Medical facilities to the underprivileged / poor families**

# National Scheduled Caste And Scheduled Tribe Hub

The Hub would be implemented by the Ministry of MSME through National Small Industries Corporation (NSIC), a public sector undertaking under the administrative control of the Ministry of MSME.

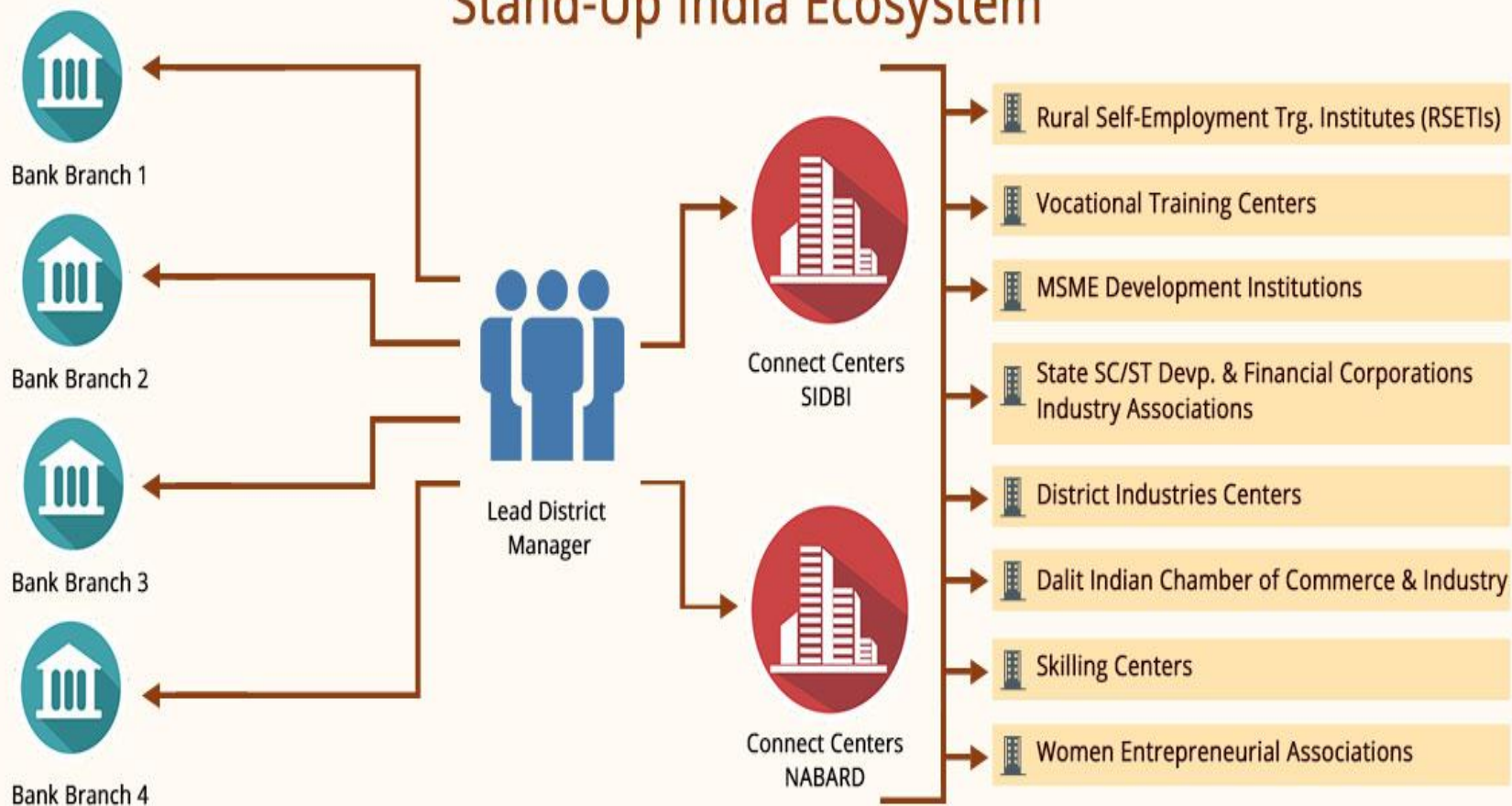
**Stand-up India:**

# Stand-Up India:

Stand-Up India Scheme Facilitates bank loans between 10 lakh and 1 Crore to at least one Scheduled Caste (SC) or ST and at least one woman borrower per bank branch for setting up a green field enterprise. This enterprise may be in manufacturing, services or the trading sector. In case of non-individual enterprises at least 51% of the shareholding and controlling stake should be held by either an SC/ST or woman entrepreneur.

# • National Scheduled Caste And Scheduled Tribe Hub

## Stand-Up India Ecosystem





# **5S Concepts**

## **Introduction:**

**Housekeeping and workplace organization should be among the first steps management takes in improving company operations.**

**By practicing the principle of “a place for everything, and everything in its place” a sense of standardized operations will be developed.**

## **Housekeeping Improvements:**

**One of the easiest ways to determine a company's attitude toward improvement activities is to simply walk around the factory and review the housekeeping practices on the shop floor.**

**“ Housekeeping is everybody's job.”**

# The 3 Different Types of Workplaces:

- **A 3<sup>RD</sup> CLASS WORKPLACE:**

With people throwing rubbish around but none to clean up.

- **A 2<sup>RD</sup> CLASS WORKPLACE:**

With people throwing rubbish around and another group of people cleaning up.

- **A 1<sup>ST</sup> CLASS WORKPLACE:**

Without anybody throwing any rubbish around, and yet everybody is cleaning up.



# Everybody is cleaning to maintain 1<sup>st</sup> class work place



## **Importance of 5S:**

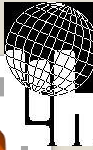
- **A clean workplace has high Quality**
- **A clean workplace keeps Cost down**
- **A clean workplace ensures Delivery on time**
- **A clean workplace is high in Productivity**
- **A clean workplace is Safe for people to work**
- **A clean workplace is high in Morale**

## **What is 5S?**

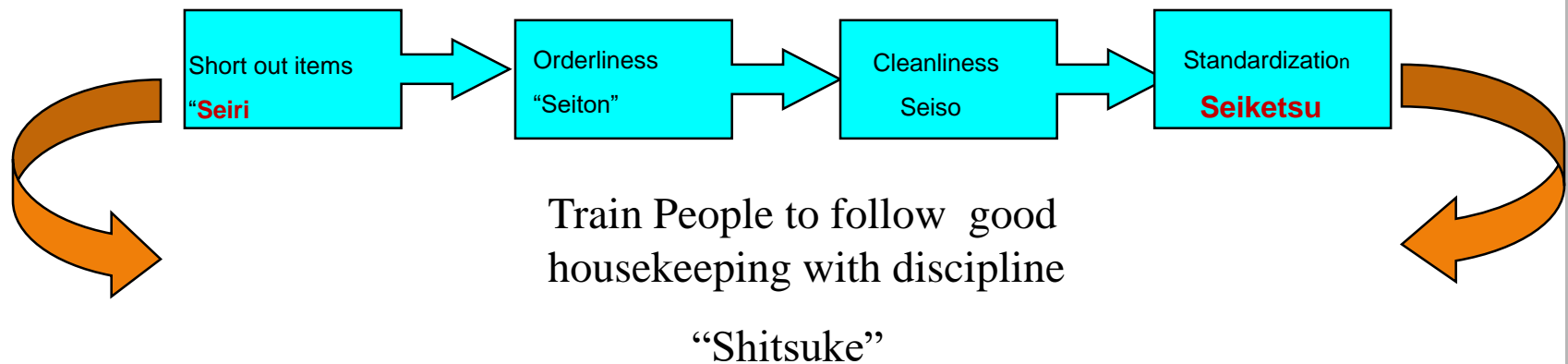
**5S is a systematic approach towards Continuous Improvement and good housekeeping.**

**Good Housekeeping means neat and clean work place. Good housekeeping is for Safety, Productivity, Product Quality, Customer satisfaction and subsequently for prosperity. This is a Continuous Process for which my Personal involvement and commitment is essential. There are 5 steps:**

<b>5S</b>	<b>Original Japanese</b>	<b>Meaning in English</b>
<b>1S</b>	<b>Seiri</b>	Sort out unnecessary items in the workplace and discard them
<b>2S</b>	<b>Seiton</b>	Arranging necessary items in good order (systematic) so that they can be easily picked for use - A place for everything - Everything in its place
<b>3S</b>	<b>Seiso</b>	Clean your workplace completely so that there is no dust on floor, machines and equipments.
<b>4S</b>	<b>Seiketsu</b>	Maintain high standard of housekeeping and workplace organization at all times.
<b>5S</b>	<b>Shitsuke</b>	Train people to follow good housekeeping disciplines autonomously.



- An essential step required for Waste Elimination

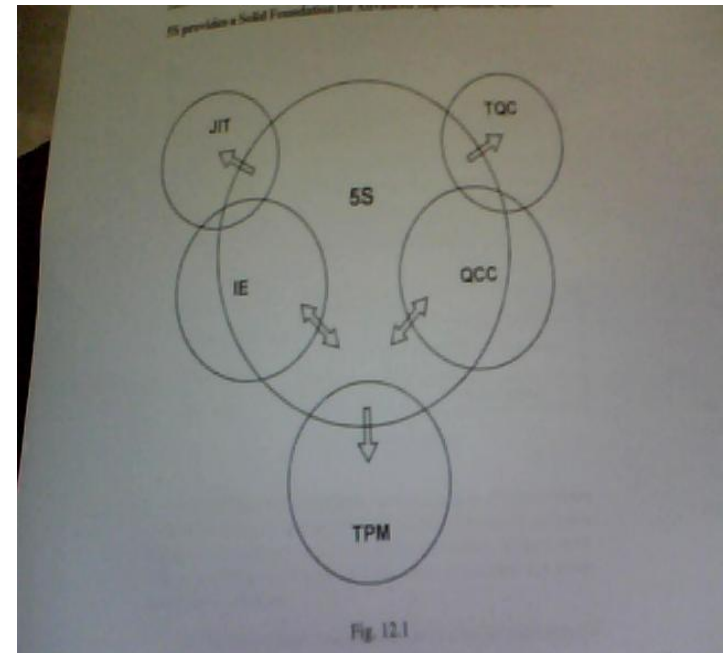


- An integral step in Kaizen

## 5S provides a solid foundation for advanced Improvement Activities:

Successful implementation of 5S will be itself bring about various tangible results.

It also is a necessary step for a company to go through before implementing advanced management techniques such as TQC, JIT and TPM, because 5S will build up a solid foundation for an organization by well-disciplined people through Shitsuke



## **Importance of 5S:**

- **A clean workplace has high Quality**
- **A clean workplace keeps Cost down**
- **A clean workplace ensures Delivery on time**
- **A clean workplace is high in Productivity**
- **A clean workplace is Safe for people to work**
- **A clean workplace is high in Morale**





# स्वच्छता अभियान सितम्बर २०१७





# स्वच्छता अभियान अक्टूबर २०१७



# स्वच्छता अभियान अक्टूबर २०१७





स्वच्छता पखवाड़ा, १- १५ दिसम्बर २०१७



स्वच्छता पखवाड़ा, १- १५ दिसम्बर २०१७

xq.koRrk ds dqN u, vk;ke

# **SOME NEW ASPECTS OF QUALITY KAIZEN**





# KAIZEN

- **Kaizen is another Japanese contribution in the field of quality improvement.**
- **The word kaizen means change for better ( i.e. Kai= change and zen=good).**
- ✓ **In the context of TQM, it means ‘ continuous improvement at no extra cost’.**
- ✓ **The idea behind Kaizen is similar to that behind quality circles –to utilise the worker’s initiatives and ideas for bringing about small improvements in work methods in their work places.**
- ✓ **The Western world thinks only managers are capable of bringing about improvements whereas in Japan even workmen are considered capable of making improvements.**

# KAIZEN

- KAIZEN= Continual Improvement
- Every day improvement
- Every body improvement
- Every where improvement
- From small incremental improvement to dramatic strategic improvement

# KAIZEN

- Implement 5S and achieve some improvement on every day basis.
- To sustain you have to standardise the work.
- Management create culture to sustain.
- Develop mindset
- Kaizen mindset means never stop .



Thank  
You



धन्यवाद!

