

i Watch

A family funded Think Tank & Foundation established in 1992

A. Research Topics from *i Watch*

1. Governance
2. Black Money
3. Corruption
4. Tax Base
5. Education
6. Economy
7. MSME's
8. Labour Reforms
9. Skills
10. Vocational Training
11. Entrepreneurship
12. Employment
13. Organic Farming

B. Social Projects from *i Watch*

1. Advocacy & Mind-Set Change
2. Educational Technology-Class rooms
3. Educational Technology-Distance
4. Vocational Training
5. Enterprise Skills Development
6. Training for MSME's excellence
7. Safe Drinking Water
8. Sanitation for Farms, Buildings
9. Rain Water Harvesting
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Ten open letters to the
Hon'ble Prime Minister of India

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Transforming INDIA

**By empowerment of the people of INDIA
Through Relevant Education
& Vocational Training**

Krishan Khanna

This book is meant for **Mind-Set-Change** of the Civil Society
so that the **80%** of the Youth opt for **Skills & Vocational
Training** and the balance 20% for University Education

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Transforming INDIA was first published by *i Watch* in 1993 and subsequently it was revised and enlarged every year till the present edition. This book is also printed in 12 other Indian languages such as Hindi, Urdu, Punjabi, Assamese, Oriya, Bengali, Gujarati, Marathi, Tamil, Malayalam, Kannada and Telugu

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Notes for the Reader:

1. This book is divided into 8 sections as mentioned above
2. Total number of individual Articles/Notes is 97
3. Total number of articles per section is indicated as above
4. Detailed contents are given at the beginning of each Section
5. Each article is a standalone and complete
6. The Reader may read any Section or Article in any order
7. At the bottom of each page the 'Section Classification' is mentioned
8. In this 21st edition of the book a short 'Overview' has been mentioned for Sections 1, 2, 3, 4, 5, 6 & 7. This is to facilitate the understanding of each Section
9. The Author has tried to keep each article as short and as relevant as possible. For more details the Reader is requested to explore the references
10. This book has been written for the 'Common Man'. Anybody who has passed Class 8 should be in a position to understand the contents

Section-I

Introduction

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Immortal Inspiration

Nobel Laureate - Rabindranath Tagore

**INDIA can become a Nation, which is best described in the
words of Rabindranath Tagore**

*Where the mind is without fear and the head is held high;
Where knowledge is free;
Where the world has not been broken up into fragments
by narrow domestic walls;
Where words come out from the depth of truth;
Where tireless striving stretches its arms towards perfection;
Where the clear stream of reason has not lost its way into
the dreary desert sand of dead habit;
Where the mind is led by thee into ever widening thought and action—
Into that heaven of freedom, my Father, let my country awake.
Gitanjali, verse XXXV.*

Dr. APJ Abdul Kalam

Former President of India

6 February 2008



Message

I am delighted to find that "*i Watch*" has been created through a citizens movement for transformation of India.

The focus of *i Watch* on governance, education, economics, entrepreneurship and employment generation are the real issues facing the nation today.

The analysis, findings and the action suggested based on comparative study is definitely revealing and can bring wonderful results if acted upon by different stakeholders in the country.

For example, the document brings out clearly the need for India to be made as an international hub for technical education.

The document also addresses the action plan for GDP growth rate from 10% to 14%.

Societal transformers, programme management agencies, new entrepreneurs, education planners can all benefit from the data and analysis provided in the document, **Transforming INDIA.**

My best wishes to Shri Krishan Khanna and his team for success in their societal transformation missions.



APJ Abdul Kalam

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Introduction

This book is meant for **Mind-Set-Change** of Civil Society. To encourage 80% of our youth and unemployed population, to learn a **Skill** and go for **Vocational Training** rather than a normal college degree or diploma.

This book is really a part reflection of the journey of my life. Thirty two years in business and management and the last twenty three years in the social sector.

This is the 21st edition of my book. The first edition was in 1993. In 1997 we expanded it to cover all the twelve major Indian languages. As hardly 8% of all Indians really understand English, this book is therefore also available in all major Indian languages such as Marathi, Gujarati, Urdu, Hindi, Tamil, Telugu, Kannada, Malayalam, Oriya, Bengali, Assamese and Punjabi.

The presentation in this book has been structured for the benefit of the citizens of India, e.g., politicians, farmers, officials, professionals, teachers, students, scholars, doctors, businessmen, housewives, engineers, lawyers, consultants, NRI's, PIO's, think tanks, social organizations and the youth of India.

Wherever required the text is supplemented with simple graphics in order to cut down as far as possible unnecessary text, unless it is absolutely essential.

The material within this book is divided into eight sections. Important Sections are:

Section 2 covers governance.

Section 3 covers education and human resource development.

Section 4 covers selected areas of the economy.

Section 5 covers the domain of skills,

vocational training and employment.

Section 6 covers conclusions and action to be taken.

Section 7 covers CSR Projects from *i Watch*.

This book is meant for anyone who may have studied up to class 8th and beyond. The matter furnished herein has been updated to take into account current available data, wherever possible.

During the 60's and 70's, for nearly twelve years, I was in charge in the technology transfer from Germany and Japan to Indian manufacturing companies. During this period, I lived and worked for nearly 7 years, in Germany and Japan and came to understand the reason for their dramatic economic growth after World War II. Their intense focus on human resource development, right from KG to higher education and with top priority for vocational training and skills for the entire work force was the secret of their outstanding growth and economic domination.

The reader is requested to consider the contents of these pages in the spirit in which they have been written, to mobilize thought and action for the people of India.

It is not a sermon, rather a statement of facts, to facilitate further awareness and action within the country, with the sole purpose to benefit the People of India.

Each note is a 'stand alone'. Any one of them can be read, at any time.

The following two examples will strengthen the importance of human resource development, relevant education and skills acquired through vocational training for sustainable development of the economy.

In October 2007 I was invited by the Ministry

of Education and the Economic Times, S. Korea to chair a session on 'Vocational Education & Training (VET) for Developing Countries'. This was part of the Global HR Forum which was attended by nearly 1,200 HR and educational experts from 50 countries. The only other Indian attending this forum was Prof. Ananth, Director of IIT-Madras.

The deputy prime minister of South Korea was inaugurating the Global Forum. About 50 years ago the people of S. Korea were as poor as Indians.

South Korea Looked at Japan and Germany who had very little mineral wealth such as ores, coal or energy in the form of gas, oil other hydro-carbons, just like S. Korea (but unlike India) but were developing very fast, in spite of the complete destruction in the 2nd world war!

South Korea realized that the main reason was relevant education and skills building through vocational training. South Korea created a position of a deputy prime minister, whose main responsibility, I believe, is human resource development, education and skills building.

Today, after 50 years, an average South Korean has an income of nearly US\$ 33,000 per year compared to US\$ 1,530 for an average Indian. Is there a message in this for us in India?

Let us look at the 2nd example which is relevant to India. Where should we as a Nation be by the year 2022; when we are celebrating the 75th year of our Independence?

The CII or the Confederation of India Industry along BCG and the world renowned management guru, late Prof. C. K. Prahlad had planned for India@75.

Out of the 74 national committees of the CII, the ones on Education, Skills & HR and the Youth are primarily working on this initiative. Prof. Prahlad was very clear that only by empowerment of the people; especially the youth of India, through education and skills building and vocational training will ensure that we attain our major goals by the year 2022.

The plan is to have 500 Million skilled people in different skills and 200 million world class graduates from different fields by the year 2022.

The history of evolution of this book has been dramatic.

The only constant has been change.

It is for you the reader to decide whether it was for better or for worse!

Krishan Khanna
Mumbai, India
24th June, 2015

Disclaimer

The information mentioned in this book has been collected from various sources in India and outside, during the last 23 years. *i Watch* does not take any legal responsibility for the accuracy of the data provided. We do not recommend that investment and business decisions be taken, based on the data provided in this book. Most of the sources of information as well as references are detailed under the section – References. For the latest data and information the reader is advised to see the current websites and handbooks of the References as mentioned in this book.

A Citizen's effort

My life in the past few years has been gravitating towards one great purpose – I have been striving to **Transform INDIA**. I believe that persistent and superhuman efforts can pave the way for phenomenal change. A huge task lies before me. However, I have concrete ideas and information in this book which I know will help direct and guide fellow aspirants to pursue the dream from various corners of the country.

Equipped with an invaluable education at IIT-Kgp and enriched by my business experience with countries like Germany and Japan, I have nurtured this dream of my lifetime - transforming the lives of the citizens of India through creating a caring and conducive socio-economic climate that would tap and develop their individual skills, support their individual needs and better the quality of their lives. And simultaneously spur growth of the economy.

It is critical that every citizen understands the power of relevant education, vocational training and human empowerment. It is equally critical for the participating agencies and individuals to understand, structure and implement the action plans to achieve results. Advocacy and procedural rigor in governance and at the planning level will help create critical momentum for change.

There is no standard formula for success. On the other hand, it is only through expert guidance and localized entrepreneurship and innovation that the envisioned change can become self-propelling.

This document is designed to aid the achievement of the larger objective by placing power and passion both in the hands and minds of those who wish to transform and of those who wish to educate, inform and empower themselves.

We need to generate sparks – through no one in particular but through all those who are interested to commit themselves. We are proactive and believe that this is practical and doable.

A “critical mass of discomfort” (Yash Pal in the NCF 2005) is already mounting pressure on us. And the passion and enthusiasm of a few is bound to create a ripple effect.

We are not daunted by this task nor do we have room for cynicism.

While this book is clear and concise, I would be happy to engage with people who share my views and my commitment.

This book is dedicated to the following Sectors. (Sectors overlap)

1. Youth of India of ages up to 35, about 850 million people.
2. Those working in the MSME's, about 460 million people.
3. Unemployed/Underemployed of ages 14 to 55, about 300 million people.

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Foreword by

Rajendra S Pawar

Chairman & Co-Founder, NIIT Group &
Founder, NIIT University

Mr Rajendra S Pawar is the Chairman and Co-Founder of the NIIT Group, comprising **NIIT Limited** - the leading Global Talent Development Corporation, and **NIIT Technologies Limited** - a Global IT solutions organization.

Set up in 1981, NIIT pioneered the computer education market in India, creating a completely new industry segment and taking it to consolidation and maturity. Mr Pawar has played a leadership role in nurturing NIIT into a leading Global Talent Development Corporation, offering learning solutions to Individuals, Enterprises and Institutions. Spread across 40 countries, NIIT has impacted over 35 million learners since inception.

In recognition of Mr Pawar's contribution towards changing the IT landscape for the country, the President of India awarded him the **Padma Bhushan** - one of the highest civilian awards given by the Government of India - in 2011.

Mr Pawar served as a member on the Prime Minister's National Council on Skill Development (2009 - 2014) and has also been a part of the PM's National Taskforce (1998), commissioned to develop India into an IT Superpower. He has been chairing the Committee on Policy Framework for Technology Based Education, Government of India.

Actively involved in India's key Chambers of Commerce, Mr Pawar has led several ICT industry fora, including NASSCOM (National Association of Software & Service Companies) as its Chairman in 2011-12, giving voice to the sector's aspirations and goals. At CII (Confederation of Indian Industries), he has also chaired the IT Committee and the Education Committee.

Mr Pawar has been an ardent advocate of leveraging technology to make education accessible to the remotest corners in the country, to educate the vast population of underserved, school-aged children. His passion led to the launch of the Hole-in-the-Wall education (HiWEL) initiative in 1999 with Dr Sugata Mitra, Chief Scientist emeritus, NIIT. The path-breaking work done by NIIT in spreading computer literacy and improving the quality of education at grass root, through the HiWEL project

has earned it the coveted- 'Digital Opportunity Award' by World Information Technology Services Alliance (WITSA) in 2008.

Mr Pawar led NIIT to participate in the ambitious human capacity building project for Bhutan - Chiphen Rigpel - designed to help the country transition successfully into a modern Knowledge Society.



The project in its entirety is expected to provide ICT skills to over a fifth of the population of Bhutan, to help them to become confident and empowered citizens of a connected and ICT enabled world. He has also been an advisor to the Hunan province of China and a member of PIAC (Presidential International Advisory Council) of the Government of South Africa for IT.

Mr. Pawar's contributions have been widely acknowledged by the industry and he has been conferred prestigious awards like- the 'IT man of the Year' by IT industry journal, Dataquest; 'Master Entrepreneur of the Year' by Ernst & Young in 1999 and the 'IT Gem of India' at INFOCOM 2013, India's largest IT & Telecom convention, by the ABP Group, to name a few.

Known for promoting industry-academia alliances, Mr Pawar has been working closely with the country's well-known educational institutions. He is on the Board of Governors of India's premier institutions- the Indian School of Business (ISB) Hyderabad, IIM Bangalore, member of the University Court of Delhi University, and the Scindia School.

Having revolutionized the IT Training industry, Mr Pawar is involved in shaping a new model in Higher Education, the not-for-profit NIIT University.

Mr Pawar studied at the Scindia School, Gwalior and graduated from the country's prestigious engineering institution, IIT, Delhi in 1972 where he pursued the B. Tech programme in electrical engineering. At the Scindia School he received the 'Madhav Award' in 1999 and the Distinguished Alumnus Award at IIT in 1995. He has also been awarded an Honorary Doctoral Degree by the Rajiv Gandhi Technical University in 2005.

9th May 2015

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FOREWORD

It is my pleasure to write a few comments about the 21st edition of **Transforming INDIA**, an iWatch Publication, which provides interesting insights on issues of great significance for a resurgent India.

This book is a reflection of Mr Krishan Khanna's work experience and knowledge. He lived and worked for many years in countries like Germany and Japan, which were devastated in the 2nd World War and subsequently rose to become the 2nd and 3rd largest world economies. This is where the seeds of his work and passion originated.

I have known Mr Khanna as a brilliant IITian, a successful businessman and a passionate and active social citizen. He went on to work, travel and tie up joint ventures with companies in 13 countries, all of which left a very clear and deep impression on his mind about the fundamental importance of relevant Education followed by Skill-building and Vocational training of the masses. Something very clearly understood and cherished by NIIT, as we believe in human resource development as a prerequisite for the growth of any developing or developed economy.

The flexible format of the chapters offers elaborate information, interesting analyses and a vast range of recommendations. All these can be very useful for planners, entrepreneurs, executives and officials engaged in the task of dealing with India's growth and transformation.

Each of the four areas - Governance, Education, Economy and Vocational Training & Employment - is covered in detail, with nuggets of information which are normally difficult to find in one document. The underlying theme being always focused on the empowerment of the people of India.

Mr Khanna and his team are carrying out this difficult task relentlessly since 1993. I believe the older versions of this book are also available in twelve Indian languages so as to communicate with people across the length and breadth of the nation.

The iWatch team needs to be congratulated for putting in this extraordinary effort, year after year !

I wish them great success.



Rajendra S Pawar

Section-2

Governance

*Where the mind is without fear
and the head is held high*

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Overview

Good Governance of a country is like good management of an organization. There is no difference. These twelve articles try to bring this out by giving numerous examples of poor governance or bad governance and the negative effects thereof.

Good governance is one of the fundamental requirements of progressive nations. Inclusive growth is not possible without it. During the last 67 years after independence, governance has been good, average and bad in the centre and different states and at different times. The results are obvious; and now since the last fifteen years with the progress of very good communications by TV, radio, mobile and the internet the people of India have begun to realize the benefits of good governance.

These varied twelve articles clearly bring out the positive fallout of managing the administration to world class standards, whether in education, healthcare, defense, sports, manufacturing, tourism, exports, agriculture, environment, law & order, population control, foreign affairs, inclusive growth, peace & harmony and finally the happiness of the citizens of India.

The INDIA you may not know



1. **71% or 840 million** people are below 35 years of age. Indians are young.
2. **28 million** people are born every year, 10 million die per year, population increase 1.6% per year.
3. **88% drop out rate** of children between **kindergarten** and **10+2**. This includes those who have never been to school.
4. **12%** are the ones that cross the 10+2 stage, **Educational 'Line of Control'**, which is our so called educated youth, go in for a regular college degree which may not be very relevant in today's context for the sake of employment generation and national GDP enhancement.
5. **62%** of all graduates from the 40,000 colleges are **Arts graduates**. Balance 38% in science, commerce, medical, engineering, I. T., law, management and special subjects.
6. **While 80%** of the world youth between 15 to 35 years of age learn a **vocation, a skill** or a **trade**, with a choice of 3000 vocational education and training (VET) programs, in 15,000 modules, we in India have only identified about 400 courses after 67 years of Independence and hardly 3% of the population goes for formal VET training!
7. We can get **engineers and MBA's** in India but no carpenters, plumbers, drivers, repairmen and other skilled personnel as per international standards in the other 2,500 vocational trades.
8. **Information Technology, software or I.T. are the only exceptions**. Perhaps because of 80,000 or more private I.T. training centers spread across the country.
9. **I.T. & Software** are only 2.5% of the world's GDP. India's present share is about 5% of GDP. For rapid economic growth and employment generation we need to concentrate on the balance **95% of the economy and enterprise** and make it world class!
10. **300 million unemployed of employable age*** and only 44 million have actually registered with employment offices with little or no hope of getting employment (our estimates)*.
11. Of all new employment generated, **3%** are government jobs, **4%** are in the 'organized sector' and the balance **93%** in the 'unorganized sector'.
12. **Out of our 490 million** workforce, **93 %** work in the 'unorganized sector' and about **7%** in the 'organized sector'. Nearly **55% to 60%** are self employed.
13. **2.5%** of the entire population, viz. 19 million people work for the central and state government; another 11 million work in the 'private organized sector'. A small part of the population work in the organized sector.
14. **All Labour Laws** are made to protect, at any cost, the above 2.5% of the Indian population. **Article 311** of the Indian constitution needs relevant revision since it over protects employees of the Government **even at a cost to the nation**.
15. While MP's, MLA's and Municipal Councilors and the village panchayats, can only be elected for a maximum of 5 years, the officials, babus, and **government employees enjoy life long benefits of employment**, in spite of their performance.
16. We have **600 million illiterate people** based on the international definition of the 3R's (reading, writing and arithmetic or education at least up to primary level of class 5)
17. The Indian definition of literacy is based on a survey of people— **"If you can write your name, you are literate"**; nobody has seriously ever challenged this definition!
18. **290 million** live below the Government of India's definition of the **poverty line** of Rs.26 (rural India) to Rs 32 (urban India) per day! this is based on being able to buy enough rice and wheat from

the Public Distribution System, PDS system and ration shops, which has food value of 2200 kilo calories per day.

19. Nobody has ever challenged this **definition of 'Poverty Line'**. How can one expect people to live with a few kilos of raw uncooked wheat or rice? As human beings, don't we need more? How about one set of clothes to cover our bodies, a set of chappals for our feet, some vegetables, milk and fruit, in our diet? How will we cook without any energy and fuel?
20. **450 million*** live below the poverty line definition of the World Bank's old definition of **@ US\$1 (Rs.60) per day per person**, or US\$ 365 per year. **800 million*** people live below the poverty line definition of the World Bank's **new definition of @ US\$ 2 (Rs.120) per day per person**, or US\$730 per year. (our estimates)*
21. **Average Per Capita** of an Indian is about US\$ 1530 per year per person (1.22 billion people and a GDP of US\$ 1853 billion). Average earning of an Indian is **US\$ 4.10 per day**.
22. **India has only 2.6%** of the World GDP and has 17% of the world population. Demands are high but buying power is low. Hence we will need to increase our **export related activities by 10 times**, as the foreign markets are **60 times bigger** than the Indian market. Our share of world markets or foreign trade is **2.2%**, down from **33%** 1000 years ago, down from **27%** when the British landed in India and down from **3%** in 1947.
23. **Only 8%** of all Indians understand English, yet most of the websites of the government of India, state governments and public institutions are in English.
24. While English is a language used in countries which account for about 30% of the world GDP, viz., USA + UK + old British colonies, yet in India, while **we talk of globalization**, we are not serious about learning the other languages of the world, eg., Japanese, German, Spanish etc, unlike the Chinese youth who are doing so otherwise.
25. India is probably at the bottom of the heap, as far as the **human development index** is concerned such as infant mortality, child care, malnutrition, women's health, sicknesses, disease, health, clean drinking water, etc.

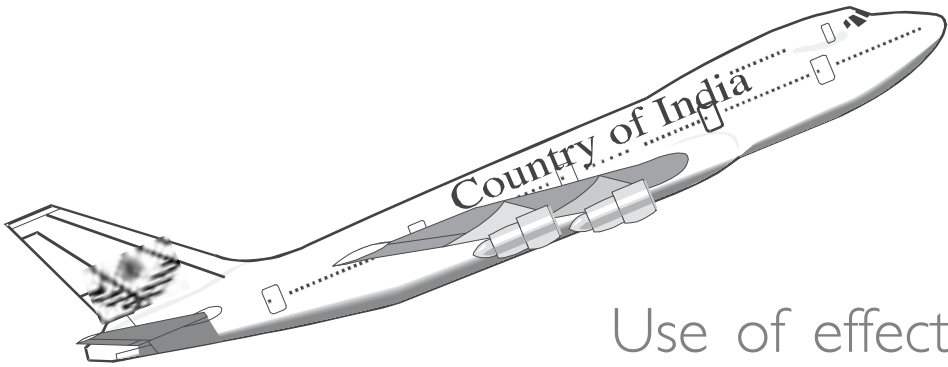
26. **Democracy** is to the people, for the people, by the people. If we have to succeed, **the citizen has to get involved and participate in governance**.
27. Unlike other countries, **we have 22 official languages, 2,600** dialects, all religions of the world, and due to low human and economic development, emphasis on SC, ST, dalits, caste, religion, sects, minorities, regions, ethnic groups, etc.
28. **Employment generation is restricted** due to existing policies which do not encourage "Labour Intensive" enterprises. Relevant labour reforms in line with prevailing practices in other countries of Asia are required for a level playing field for Indian organizations.
29. **The size of Enterprises** cannot be decided by officials in the central government. They are decided by technology, process, international market forces and competitive pressures. Reservation for small scale industry, **SSI**, needs to be scrapped and MSME's should be encouraged. **SSI's are 5% of the Indian GDP. 99.7%** of all organizations in the world are MSME's. **70% to 80% of the Indian GDP are MSME's**. We need to understand the meaning of 'E' in **MSME** (small and medium enterprises).
30. As per www.loksatta.org, about **Rs. 4,200 crores are spent every day**, to govern India at the centre and state levels, both on revenue as well as on capital account. Is this transparent? Is the money well spent? Citizens need to use **The Right to Information**, RTI bill, and also take part in the governance of India, through **citizen groups**.
31. About **800 members of parliament** in the lok sabha and rajya sabha and **4,210 members of the state legislature assemblies** control this expenditure of Rs. 4,200 crore per day.
32. Our note on Fiscal Governance is very relevant to day. See page 29.

You may download a sample of the contents of this book, Transforming India, from our website in English, Marathi, Gujarati, Urdu, Hindi, Tamil, Telugu, Kannada, Malayalam, Oriya, Bengali, Assamese and Punjabi.

<1 billion = 1000 million> <1 million = 10 lacs> <1 crore = 100 lacs = 10 million> <1 US\$ = Rs. 64 (approx)>

Country of India

22nd Century



21st Century

Use of effective
human capital
is the answer

COUNTRY OF INDIA

Imagine India as an aircraft travelling from the 21st to the 22nd Century

Pilots

Politicians and MPs of the Lok Sabha + Rajya Sabha

Co-Pilots

Politicians and MLAs of the 35 States and Union Territories of India + Councilors of the 7,000 Municipalities

Cabin Crew

Employees of the State and Central Government

Passengers

The 1,225 million people of India

Engines and wings of the plane

The 35 states and Union Territories of India

Fin, rudder, navigation & control systems

The PMO and all the Ministries

Tailplanes & Stabilizers

Offices of the President and Vice-President of India

Fuselage or body

All the infrastructure of India, natural and man made.
India needs the best and most effective Pilots +

Co-Pilots + Cabin Crew, to steer on the path of progress, peace and prosperity so as to attain the highest quality of life for its 1,225 million people.

The main goal of the key elements is to govern and administer and work for the betterment of the citizens and country of India. There is no other objective!

The quality, safety, happiness and health of the 1,225 million passengers, depends entirely on the basic skills, education, experience, knowledge, training, sincerity, maturity and health and condition of all the key elements, Pilots + Co-Pilots + Cabin Crew.

Use of effective Human Capital

The Golden key which can transform India into a superpower.

When Politicians & Officials take decisions, they need to fulfill **ONLY** two basic criteria:-

1. **Will it benefit the People of India, present and future?**
2. **Will it benefit the Country of India?**

You be the judge!

Economic and business reforms

After 67 years of Independence, where are we?

After 67 years of Independence, if we bench mark India against other countries of the world, especially with those in Asia, we note that though a lot has been achieved by us, a lot more needs to be done.

We need to learn from our past and move boldly into the future. India has achieved many milestones, but not enough to eradicate poverty, illiteracy and other vital issues, for the 1,225 million people of India.

In spite of India's glorious past history and present outstanding world class quality of our human capital, which not only is responsible for running many organizations, in manufacturing, trading and services sectors, around the world but also responsible for advising many countries on this planet, **we have not been able to put our own 'house in order' to world class standards.**

We are not able to always use the best effective human capital for running the country, both for the public as well as the private sectors! This needs to be suitably amended. In the first instance, we need to start taking some simple and effective measures which are for the good of the majority of the people of India.

We should plan to become a resource base for world markets since 97.4% of the world's buying power and 97.8% of the world's trade is not with India!

India should learn from the best!

We should either try to teach the world, if we are better than them, or be humble enough to learn from the best around us, other options are irrelevant!

W. Edwards Deming, one of the world's greatest management and quality gurus, when asked, what his one point recipe for nations and organizations was, said, "People are important".

Experience of other countries!

Alan Greenspan, the Chairman of the Federal Reserve Bank of USA, once remarked that "lack of labour rigidity is the key to success in the US".

The US has benefited much more than Europe and Japan because American businesses enjoy the freedom to hire and fire and only keep the best human resources. S.E. Asia and China have greatly benefited due to flexible and fair (for the masses), human resource policies.

Good Governance is the 'Golden Key'

Good governance can unlock India's latent potential! We have been analyzing India's problems based on years of research, analysis and personal interviews with thousands of Indian citizens as well as NRIs and PIOs.

India needs to improve its governance and administration to world class standards, as soon as possible. We firmly believe that India would be rated as the No.1 country in the world, as far as potential vs performance is concerned!

Let us unleash this latent power and energy for the benefit of the 1,225 million Indians, and for the benefit of mankind on our planet.

India needs a new and innovative paradigm shift in thought process and planning for achieving a 10% to 14% GDP growth rate per year

1. Why can't we have 100 zones on our coastline, each one equivalent to a Dubai, Singapore or a Hong Kong? These 100 zones will in effect increase the GDP of India by 500% in 15 to 20 years! China has more than 500 **Special Economic Zones (SEZ's)**!
2. Our suggested '**Relevant Manufacturing Policy**' for India can also enhance the GDP to double digit growth. We can achieve high growth rates of the Asian Tigers, including China, provided we follow such policies! See our website www.wakeupcall.org and this book for details.
3. The existing **educational policy**, on human development, caters mostly for higher education. About 25 million people of different age groups, enter the system every year. About 3 million make it in higher education, the balance 22 million 'drop off' at various stages. We need to change the policy to benefit these 22 million.
4. Make 'some part or parts' of coastal India as '**tax free zones**', Use the best examples of Mauritius, Isle of Man, Seychelles, UAE, Bermuda, Luxembourg, Monaco and Liechtenstein.

Tourism, exports, FDI, investment, employment generation, education, vocational training, infrastructure, law & order, reduction of corruption, improvement of health services and GDP can improve at a faster rate with **education good governance and effective administration.**

Governance & administration

Primary duty of politicians and officials

1. Rate of growth

Due to reforms in the last decade we consider 8% to 10% as the 'New rate of growth' of the economy. India needs to grow at 10% to 14% per year, to meet the well being and aspirations of its people.

This goal is achievable with **Education, Good Governance** and Effective Administration.

2. Cost of Governance in India

As per www.loksatta.org, an NGO based in Hyderabad, the expenditure on 'Governance of India', by the 790 politicians at the Centre, the 4,120 in the 35 States and Union Territories and the 19 million employees of the Central and State Governments use about Rs. 4,200 crore per day or Rs. 1,533,000 crore per year, both on capital and revenue accounts.

About 1.87% of Indians govern 1,225 million people! This comes to about US\$ 283 billion or nearly 16% of India's Gross domestic product or GDP! Are Indian citizens getting their money's worth?

Only you the Indian citizen can give the actual and final answer. You be the judge of your own country and decide. Our study clearly indicates that the people of India desire and deserve much better Governance and Administration.

3. 'Corporate Governance' is only a small part of 'Governance'

In 2001, Indian listed companies on our stock exchanges, embraced the culture, practice and accountability of 'Corporate Governance', which covers about, 10% of India's GDP and 100% of our market capitalization.

Good Governance of India should be an **AI** priority, as it affects all the 1,225 million people and 100% of India's GDP! It covers all activities of the Nation, that is, the public sector, private sector, unorganized sector and even NGOs.

i Watch and its members have mailed and distributed about 600,000 books, about the advantages of good governance, and loss to the citizens and the nation, in the absence of good governance and effective administration. We have received positive responses from Indian citizens in politics, government, business, management, teaching and the youth of India. We are therefore **very positive about INDIA**.

4. Democracy - what does it mean?

Democracy is of the people, for the people and by the people. Citizens must play an active role. As President **John F. Kennedy** said, "*ask not what the country has done for you, but what you have done for the country*".

In a world of globalization and keen competition, Indians will have to change their mindset and take a much larger interest for their country, **by participation in the governance of India**.

Good governance will be a key requisite for the 2nd generation reforms! We see an upward movement in the GDP growth rate of 10 to 14%, with **education, good governance and effective administration**.

5. Politicians & Bureaucrats - their primary & ONLY duty

The key objectives of elected politicians in power and appointed employees with the Central and State Governments is **firstly**, to administer and govern and **secondly**, to serve and benefit the citizens and the country of India in the best possible manner.

We seek your help and advice, in reaching out to the key members of the major political parties, think tanks and leaders in government, teaching, media, business and the youth about the advantages of good governance & effective administration and how it influences the economy. Here are some meaningful observations about Good Governance.

"The purpose of a government is to make it easy for people to do good and difficult to do evil"
Sir Gladstone

"The punishment suffered by the wise who refuse to take part in the government, is to suffer under the government of bad men" **Plato**

"Nation first and then the individual"

A. P. J. Abdul Kalam

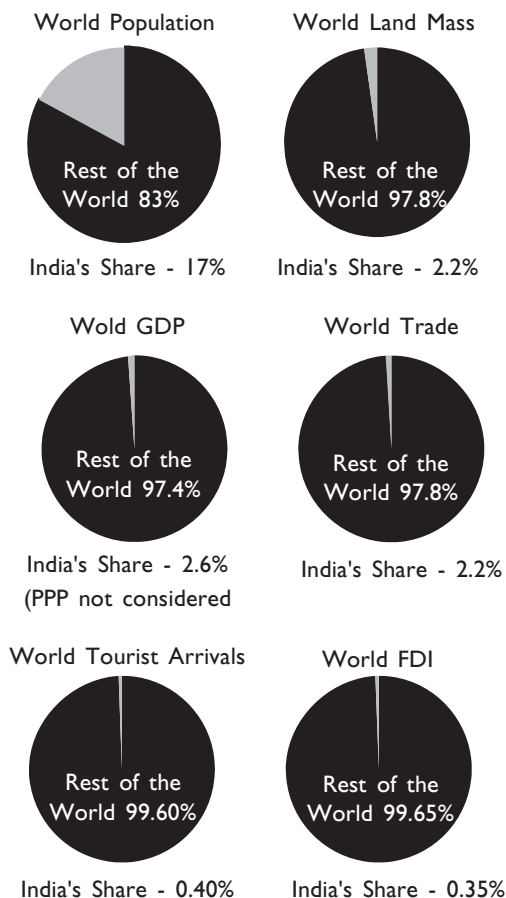
"In the last 67 years, after 1947, it would seem that most of our development has been directed towards the top 300 million of the Indian population. This needs to be changed, since until the balance 900 million people of India benefit, the country will not move ahead as a developed nation."

i Watch

Good governance can transform India into a Superpower

1. Where is India in the year 2015?

One thousand years ago, in the year 1001, the world was roughly divided into **3 main trading blocks**, China, India and the rest of the world, each with about 33% of the world trade. It is estimated that India had nearly 27% of World Trade, about 250 years ago, when the British landed in India. The King of Spain sent Columbus to search for India as we were a rich country. Columbus landed instead in what is named USA today and called the first people he saw as 'Red Indians'! India has the following parameters in 2015:



These are the ground realities in 2015!

Management of India Inc. needs to be world class and poor governance or poor management and inefficient administration minimized and reduced, or preferably, eliminated!

Obviously India has to increase export and tourism by 10 to 50 times respectively, in the next 20 years! This has many advantages. Exports and tourism will improve governance, administration, efficiency in manufacturing and services, cost competitiveness, FDI inflow, latest and best technology will come into the country, more jobs will be created, the infrastructure will have to improve and the standard of living of the people will go up. Better governance and administration of India is needed!

2. Effective Administration and Good Governance. What does it mean?

As per the Oxford English dictionary, Administration means; a) Management of a business, institution, a government agency; b) The management of public affairs; government; c) The administration of justice, etc. Govern or Governance means; a) rule or control with authority; b) conduct the policy and affairs of government and organizations; c) Influence or determine a course of action; d) Be the predominating influence; e) Be a standard or principle for; constitute a law for; serve to decide; f) Check or control {especially passions}. Adding 'effective or good' makes them better. Simply put, Effective Administration means effective management of India. Good governance means good management of India.

3. India's Latent Energy - it's gigantic!

The Latent Energy of our nation is gigantic, it needs to be allowed to blossom and grow. This is only possible with the positioning of good governance and effective administration, in our system, something, which is not impossible for India! India needs to get their best teams in position.

We have the expertise. Let us unleash this power! At present, we cannot always use the best 'Swadeshi or home grown' effective human capital to run our own country including our own public and private sector. When future generations of Indians read Indian history, this will go down as a lost opportunity for India. 1,225 million people but we cannot place our best teams in position and put our '**House in Order**' to world class standards!

No amount of money or technology can ever replace the presence of effective human capital. In fact, effective man power or personnel teams, know how to rustle up other resources. The reverse is not true, especially in a competitive and global environment! Other countries in the world recognize Indian talent. **Better governance can unleash this latent energy for India.**

World class requires hard work

1. Effective human capital is the key to success

It is a very positive sign that the Prime Minister and others are talking about the 2nd generation of reforms and about “**good governance, transparency and efficient administration**”.

In 1930, when the US Wall Street crashed, human capital accounted for hardly 10% of the value of the market capital. In 2015, it accounts for about 90% of the market capitalization.

High quality effective human capital can prevent disasters, catastrophes and help plan and chart out progress and prosperity for the organizations that they represent. The first essential to good governance is quality of effective human capital, i.e., SQ*+ EQ*+ IQ* should be high.

**SQ, EQ & IQ mean spiritual, emotional & intelligence quotients respectively. 70% rating of people is for SQ+EQ. IQ account's for only 30% of the total rating.*

2. People power in democracy

India has about 35 assemblies, at the State and Centre levels. This comes to about 5,000 politicians in power at any given time! Total number of politicians, including the ones out of power, is probably about 2 lacs, at the maximum. Total number of government employees, about 19 million, which includes 2 million PSU employees, and rest of the population, about 1.225 million!

So the Indian Citizen is definitely very powerful, provided he or she really understands the power of democracy, of one-man one vote!

3. Economic parameters— how has INDIA fared after 67 years of freedom?

- India's per capita is US\$ 1,853 per year v/s China's \$ 5,210 and USA's \$ 47,900. At the present rate of growth the Chinese economy may grow to 10 times the size of India, within 15 years time.
- India has 17% of the world's population, but 2.2% of the world's trade and 2.6% of the world's GDP! 99% of world markets are outside India! India must consider a plan to become a resource base for the world.
- Poverty Line per person, as per Indian Govt., is at US\$ 200 per year, (Rs. 26 rural to Rs. 32 urban per day or Rs. 9,000 to Rs. 11,000 per year).

- The World Bank has revised this amount to US\$ 2 per day per person, or US\$ 730 per year
- Market capitalization of 7,000 Indian quoted companies at US\$ 1400 billion (only one company EXXON Mobil in USA is US\$ 407 billion).
- India's free reserves are US\$ 295 billion vs. China/Hongkong/Macau \$3230 billion. Presently, 97.8% of the world's markets are outside the reach of India. We need to export more!
- In 2011, Foreign Direct Investments (FDI) into India was US\$ 30 billion v/s US\$ 100 billion into China + Hong Kong. Total FDI worldwide, is estimated at US\$ 1,320 billion per year.
- China's Literacy rate is much more than of India. In China, all children attend school for 9 years. For secondary education, the attendance is about 89%.
- Tourist visiting China are nearly 15 times more than India i.e. 90 v/s 6 million. Worldwide Tourism Industry is 9 times of Information Technology. China has 12 airlines vs 7 in India. China is building 4 lac hotel rooms per year, India has a total of 6 lac hotel rooms.
- If one visits Beijing or Shanghai, everything looks 'Neat & Clean'. 60% of Bombay and many parts of New Delhi look like 'garbage dumps'!
- In the Beijing World Olympics, India was placed practically last, out of 200 countries, with 3 medal; China was 1st with 100 medals!
- China's World Trade is nearly 10 times of India's. Can we pay for oil imports of US \$ 100 billion/yr., and increasing, when exports are only US\$ 300 billion per year? 70% of our hydrocarbons need to be imported.
- Food grain production in China is about 410 million tons v/s 208 million tons in India, although the cultivable land in China is less than that of India.
- India's share of world trade dropped from 3% in 1947 to 0.8% in 2005, a negative growth of 380% in 59 years. Now it is upto little over 2.2%.
- Every year we have **floods & droughts** in certain parts of India. We need to find suitable solutions to this problem.
- India's birth rate is 200% more than China. We produce more than one Australia per year! We need to provide additional 10 million jobs per year!

Loss due to poor governance

- China has 15 million births per year, India has 25 million! Life expectancy in China is 75 years vs 67 for India!

4. Poor governance & ineffective administration

In the last 67 years, we seem to have missed putting in place, **world class foundations of work excellence, work ethics & work culture.**

In the organized sector, there is 'no fear of loss of job'. Protection to 1.87% of the population, at the cost of the nation! Who will protect the rest of the 98.13% of India, which is mostly very poor?

Under the present circumstances, we cannot use the best & lowest cost 'Swadeshi' human capital to run our own country, public and private sector, to the highest levels of global efficiency.

India cannot take advantage of its PPP position for world markets. Cost and quality of our human capital is not market driven. Market driven human capital can make a sea change to India's economy and employment.

Good governance is required to make this change.

5. Examples — to highlight poor

governance & ineffective administration

Each situation presents an opportunity for the country!

- 10,000 municipal hospitals in India, but what is the quality of health services that the people of India get?
- 9,000 municipalities in India, but how are our cities and towns maintained? The US\$ 5,700 billion Tourism Industry has not made India a favourite destination! Tourism is a big employment generator. China + Hong Kong + Macau get 90 million tourist arrivals per year vs 6 million for India.
- 35 electricity boards, but what is the quality of electricity service? We cannot stop 35% revenue leakage due to power thefts and losses.
- One can get a driving license without any test or even visiting the RTO office. After 67 years of Independence, we have not even ensured that Indians should be quality drivers!
- Can we ever hope to reduce road accidents by allowing old and dangerous vehicles on our roads and allowing illiterate drivers with 'easy' licenses? India supposedly has one of the highest rate of road accidents per 1000 vehicles, in the world.
- After 67 years of Independence there are only 70 million tax assesseees, most of them from the organized sector.

- The actual number of taxpayers is hardly 35 million. Affluence of the economy seems to indicate much higher numbers! Only 2 million declare an annual income above Rs. 2 lakhs per year and 200,000 above Rs. 10 lacs per year!
- India is the 2nd. largest producer of vegetables in the world, 147 million tons per year and fruits 75 million tons per year. About 40% of it is wasted between the farm and the end customer, what are we doing about harnessing this wastage of Rs.50,000 to & Rs.75,000 crores per year to benefit the farmer?
- Fiscal deficit of the Central Government is at Rs. 132,000 crore or nearly 5.3% of the GDP.
- Fiscal deficit of State Governments at Rs. 135,000 crores or nearly 6% of GDP.
- 60 million tons of food grains in FCI godowns which cost Rs. 15,000 crores per year to maintain, this includes cost of destruction due to weather, bad storage and rodents. People in extreme poverty, do not have access to this food, although nearly 5 to 10% is wasted or destroyed due to bad storage.
- Cost overrun of centre and state projects is about Rs 70,000 to Rs.80,000 crores per year.

Is this fair to the poor people of India? When 300 million are jobless and 350 million are partly employed [unorganized sector] and 240 million below the poverty line [sectors overlap].

In the unorganized sector, mostly the poorest of the poor work, including women and children. In a poor country like India, they have to work or perish.

Activists against child labour need to experience extreme hunger and human deprivation to understand why gentle children have to work to keep alive!

For every one person, who wants to leave the 'Organized Sector' there would be at least a few thousand willing workers, who would be happy to give any thing to get a good job. In a poor country like India, the minimum wages are Rs. 1250 to 4,900 per month, but some people who earn Rs. 5,000 to 10,00,000 per month or more, **are protected!**

We should protect employment but not some employees, at any cost to the nation.

<1 billion = 1000 million> <1 million = 10 lacs> <1 crore = 100 lacs = 10 million> <1 US\$ = Rs. 64 (approx)>

6. India as an investment destination in the Asia Pacific Rim area?

It is estimated that the overseas Indians, NRIs, numbering 25 million, save about \$75 to \$80 billion per year (\$4,000 per year per head). A substantial amount of this could flow into India, provided we put our **'house in order'** to near world class standards.

The NRI 'world' is like 'another India' of US\$ 240 + billion GDP. China's FDI was US\$ 100 billion, 70% contributed by non-resident Chinese and 10 times more than India. NRIs invested only about US\$ 6 billion into India, mostly as short term deposits.

Under the present scenario, India can not use the best quality and/or the lowest cost manpower that it has within its borders. That is why countries in the Asia Pacific Rim have overtaken us. e.g., China, Malaysia, Vietnam, Thailand, Taiwan, Singapore, Hong Kong, Indonesia, etc. The same is the case of Latin America and Mexico, which are preferred areas of destination, rather than India, for manufacturing and many service and trading activities out of USA, Japan, Europe and even the Middle East.

India has lost billions of dollars worth of exports and additions to its GDP, not to mention the use of the latest technologies from the developed countries, leading to a lower cost of production and more efficient methods of operation, as per global norms! A lot of jobs, skills and know-how have also been lost, both directly and indirectly, to other countries. Except in IT, India has not taken full advantage of its pool of highly trained English speaking manpower.

Healthy and efficient organizations create wealth for the nation and jobs for the economy. Highly skilled and efficient manpower can deal with the fast changing Global Economy.

7. Reasons for India's problems

We protect some employees at any cost of the nation! **"Nation first & then the individual,"** says Dr. A. P. J. Abdul Kalam, former President of India.

Article 311, of the Indian Constitution, protects employees of the Union and State Governments. This needs to be suitably amended, since it protects only 2.5 % of Indians, who are the employees of the State & Union Government, and indirectly, the employees of the organized private sector.

There is no fear of loss of job whether you deliver or not! Do the U.S., U.K., and Chinese Constitutions

Solutions for good governance

also protect employees of the Federal or Union and State Governments?

No country can run efficiently, especially, if some critical sections are protected, in this manner! 2.5% of Indians is not even the Vote Bank! Union Ministers, MPs, MLAs, municipal councilors can be changed after a term of 5 years or even earlier, as per the wishes of the people.

Under the present system, employees of the Union and State Governments and their affiliates, as stated above, are given, for all practical purposes, life long employment, irrespective of their performance.

This is unfair to the people of India, most of whom are very poor.

People of different religions and faiths pray to the Almighty. All these people are basically **'God Fearing'**. Let us ask ourselves, would 'the common man' pray and respect the Almighty, if we did not fear him? **Our great leaders have always said that 'work is worship'.**

8. Conclusion

- Democracy is for the people, to the people and of the people. The citizens need to take part in nation building, since collectively, all are responsible.
- The well to do and successful citizen has a special responsibility of carrying along the less fortunate ones in the country.
- If Indian democracy is to work, it cannot function only in the 'top-down' direction, it requires also a 'bottom-up' approach.
- All of us who are fortunate to be living well in this country need to 'give-back' something for the betterment of all the people of India.
- Only blaming the politicians and officials will not solve our problems.
- Unless we work as a well co-ordinated and dedicated national team, a two digit growth rate of the GDP may not be possible to achieve.

The best 'Swadeshi' or 'home grown' **effective human capital** is the answer! We have the capability in terms of Quality Human Resource, let's use it for the India of the 21st Century.

<1 billion = 1000 million> <1 million = 10 lacs> <1 crore = 100 lacs = 10 million> <1 US\$ = Rs. 64 (approx)>

How to achieve world class efficiency?

One-PointAction Plan for India



www.loksatta.org, Rs. 4200 crores are utilized every day, both on Capital as well as on revenue account, at the Centre and State level, to govern India. The people of India must be protected and be satisfied that this money is well spent!

The key objective of this sector is to administer and govern and to serve and benefit the citizens and the country of India in the best possible manner. Government can only facilitate jobs, education, health, the economy, provided it is efficient and world class! It should be the 'torch bearer' for our economic reforms. 28 million are born & 10 million die every year.

1. The best 'home grown' or 'Swadeshi' effective human capital is the answer!

At present, we cannot always use the best quality and lowest cost 'Swadeshi' or local / domestic effective human capital to run our own country including our own public and private sector.

When future generations of Indians read Indian history, this will go down as one of the reasons for hindering India's fast growth between the years 1947 to 2015 a period of 67 years!

1,225 million people but we cannot place our best teams in position and put our 'house in order' to World Class standards!

No amount of money or technology can ever replace the presence of effective human capital. In fact, effective man-power teams, know, how to rustle up other resources in a highly competitive and global environment, **the reverse is not true.**

2. The 'engine' of the Economy

The organized sector is supposed to be the 'engine' of the economy of India. It should be 'World Class'. A total of 19 million people work with the Public Sector and about 11 million people work with the Private Sector. Total employment is about 30 million in this sector.

It needs to be accountable, responsible and **should be a used as a benchmark** for efficiency, good governance and good administration. **As per**

The 19 million employees of the union and state governments need to be of a world class standards & extremely effective. 1,225 million people of India, depend upon them!

3. Indian Human Capital admired world wide, but not in India!

We have some of the best human resources in the world, but due to some of the constraints, as mentioned below, **we cannot use them always in our own country!**

Indians run some of the largest organizations in the world, both in manufacturing as well as in service sectors. Indians also help as advisors to many nations. **Who ever brings in the best and effective team to govern and administer, will be the winner.**

Today, all good politicians, all over the world, talk economics first. **The best Politicians and Leaders 'Walk the Talk'.**

India needs to be competitive in the global markets. Our World Trade is only 2.2%, while our population is 17%. The GDP of India is only 2.6% of World GDP. In India, **Demand is very high, but Buying Power is low**, due to a low per capita income of only US\$ 4.10 per day! As per the World Bank definition of Poverty Line, the per capita earning per day was **US \$ 1** which is now revised to **US \$2** per day.

<1 billion = 1000 million> <1 million = 10 lacs> <1 crore = 100 lacs = 10 million> <1 US\$ = Rs. 64 (approx)>

In order to survive and create employment, India needs to benchmark **Employee Laws** with competing countries in Asia, Latin America, Middle East and Eastern Europe.

4. Reasons for India's problems

Sometimes we protect some employees at any cost to the Organization and the Nation!

Article 311, of the Indian Constitution, protects employees of the Union and State Governments.

This needs to be suitably amended, as it is **not desirable in today's context**, since it over-protects only 1.7 % (19 million people) of Indians who are the employees of the State and Union Government, and indirectly, the employees of the organized private sector, (11 million people) representing a total of 2.5% (30 million people) of the population of India.

There is NO FEAR of LOSS of JOB whether you deliver or not!

Sometimes, these employees, seek and get protection for lifetime employment, whether:

1. They work or not,
2. They are corrupt, or caught red handed taking a bribe
3. They are absent but marked present
4. They are efficient or inefficient
5. They subcontract their work to others
6. Willfully destroy public property
7. Take sick leave of 15 days/year, year after year! It is impossible to be sick, every year, exactly for 15 days! (Assuming 15 days sick leave per year)
8. Restrict retraining, redeployment and restructuring, for productivity improvement within the same organization and
9. Disrupt work, and damage or sabotage the fixed assets of public enterprises, in order to pressurize managements.

No country can run efficiently, especially, if some critical sections are protected, in this manner!

2.5 % of India's population is not even the vote bank!

Union Ministers, MPs, MLAs, municipal councilors can be changed after a term of 5 years or even earlier, as per the wishes of the people.

Under the present system, employees of the Union and State Governments and their affiliates, as stated above, are given life long employment, irrespective of their performance!

5. Action Plan for India

India needs an **Employee Policy** to protect the citizens from exploitation!

We should protect employment, but not employees who do not come up to expectations and do not perform to normal standards of work culture and work ethics. Especially when we have 45 million unemployed registered with employment exchanges. The total number of unemployed able bodied Indians is estimated to be 2 to 6 times this number. (Our estimate)

This includes **C2C** or from CEO or Chairman to Coolie! The word **Labor Law**, refers to the 19th century, and should be changed to **Employee Law**. The leaders and the people of India must decide by public debate in the media and the Parliament to finalize the best course of action.

We are not suggesting any form of National Policy on retrenchment. Individual organizations should be allowed to decide themselves, about downsizing, retrenchment and reduction or increase of manpower.

Only Healthy Organizations can generate new employment.

Organizations should be allowed to change employees, if they fall in some of the areas as mentioned under paragraph # 4. Especially, under clauses #4 (2), (3), (5) (6) & (7).

You DECIDE!

We should protect employment but some employees cost the nation a heavy price!

This one-point-action-plan will unleash the 'Latent Potential' of the 1225 million People of India.

The population BOMB that must be diffused

1. India's Population Policy - much to catch up and learn from others!

India has 1,225 million people. China has 1,343 million. Nearly 28 million are born every year in India and ONLY 17 million in China. China has had a more effective population policy than India, although they started in 1970. India's population policy started much earlier, in 1952. By 2045, we shall overtake the Chinese population, with an Indian population of 1,550 million! Life expectancy in China is now 75 years vs 67 years in India. In China the average family size is 3.63 members. In India it is much higher, with 5.52 members.

2. Literacy in China & India - where are we in 2015?

In the last century, India's population has increased from 250 million to 1,225 million, an increase of about 440%! In India, in the last 100 years the actual number of poor people, has steadily increased. In China, all young children go through 9 years of schooling which ensures 93% literacy. In India it is hardly 61%. China's per capita per year is US\$ 5,210 vs US\$ 1,530 for an Indian. Their GDP is 3.7 times of India.

3. Percentage of people below poverty line in China and India

Because of China's successful Population Policy, **China has added 300 million less people, in the last 40 years.** China has been able to reduce the people below poverty line to 10%, i.e. only 130 million people. INDIA has 25% or 300 million below the poverty line. We fail to understand the fact why some thinkers and leaders in India, mention that our population is our strength. How can they make such statements, with so much poverty, illiteracy and a low standard of living? It's a nightmare for the poor in India! The average age in China for women to get married, the first time, was 23.57 years. In India, do we really care? It could be as low as 13!

4. India's economic parameters - the simple truth!

India has 17% of the world's population, 2.2% of the land area, 2.6% of the world's GDP and only 2.2% of the world trade. This means that 97.4% of the World's GDP [Buying Power] and 97.8% of the world's trade is not with India! India must plan larger exports, for

increasing the standard of living of its people.

5. Adding population but without the required GDP growth - where are we heading?

Due to a very poorly administered Population Policy, we are adding **one Australia per year** or one each of all the following countries per year, Switzerland + Singapore + Hong Kong + UAE + Bahrain + Oman + Saudi Arabia + Qatar + Kuwait, every year, year after year, but without the GDP, health, literacy and standard of living, that they have! Lack of knowledge of global economics, poor governance and inefficient administration of our leadership, both political as well as administrative, are very much responsible for this sad and terrible state of affairs in India.

6. Overpopulation and poverty can unbalance the world!

High population growth can devastate a nation and also cause an unbalance in the world, leading to instability in world economics and world peace. When will the Indian leadership open its eyes and realize the real truth? When will we start really taking more effective action? Anybody listening?

7. Overpopulation and availability of land?

At the present rate of population growth, the existing grain land will become inadequate to supply food and water to the increasing population. In 1960 the cultivatable land was 0.21 hectare per person, this has dropped to about 0.10 hectare in 1999. The water tables are depleting at twice the rate that they are being replenished. **The full potential of water harvesting is hardly utilized.**

Is anybody listening or worried?

8. The poor are exploited in India - do we really care enough

Even today, nearly 300 million people, in India, are below the poverty line. What will happen in the next 33 years, in 2045, when we have added another 550 million people! Overpopulation can only benefit some of the well to do, some of the rich and some powerful politicians, as they can then exploit the weak and poor. This is the case in India today. Poverty-stricken,

Education will stabilize population

the poor men, women and children of India have to bear exploitation in all spheres of their daily lives.

9. The complacency in India about overpopulation is frightening!

Are the poor really enjoying poverty? The 300 million poor would love to have a better life. It is not on the top priority agenda of any political party, inspite of the above facts. After 67 years of Independence we are still very poor, where 300 million earn less than Rs. 26 to 32 per day or Rs. 10,000 per year or about US\$ 200 per year! What will be the scene, after we add another 550 million people by 2045? **This is like adding another USA + Europe, but without the standard of living that they have.** We need to plan for the disaster ahead.

10. The world is worried, are we?

International agencies, such as the **World Watch Institute** and others are more worried about India than India itself! India is sitting on a time bomb, which it refuses to accept, inspite of the extreme poverty of its 300 million poor people, below the poverty line!

11. Media coverage about disadvantages of over population is totally inadequate!

There is inadequate media coverage on TV, talk shows, radio, cinemas, magazines, newspapers, schools, villages, about, for example, the China-India comparison & about the ill affects on health, drinking water, jobs, sickness, food, education, transport, housing and other aspects of life, due to over population. Everyone agrees, that the way Sanjay Gandhi started solving the population problem, was wrong. But does it mean that we should ignore it, especially, as we are reeling under the bad effects of a very high and unmanageable population, and all the disadvantages associated with it?

12. Awareness programs about disadvantages of overpopulation are too few and far apart!

Awareness programmes, showing the disadvantages due to overpopulation, need to be intensified, by 80 to 100 times. Let the people understand the burden of overpopulation. There must be gentle and indirect disincentives for having large families. Successful examples of other states like Kerala and Tamil Nadu, must be communicated. Newspapers & media should be full of it every hour, every day & not only on **World Population Day!** The poor are misled to having more and more children.

13. Per capita income of India - very close to the poverty line as !per World Bank norms!

India has to go in for a very strong and effective population policy. We should learn from others who are better than us. We should not only aim to survive, as we have done in the past, but plan to improve the standard of living of all our people. The present per capita, in India, of US\$ 1530 per head, is only slightly higher than the World Bank minimum poverty line of US\$2 per day or US\$730 per year!

14. World Class Governance - the foundation stone to effective implementation!

All this is only possible with good governance and effective administration and a very high priority long term effective population policy. Future generations of Indians depend upon us. The enclosed notes attempt to emphasize the crying need for world class governance and good administration. As it ensures excellence in all areas of the economy, including family planning and health.

15. Comparison between China & India. This should wake us up!

In other basic areas, which benefit the masses, such as literacy improvement, population control, health care programs, infrastructure development, Olympic medals, etc, China is way ahead of India. At the present rate of growth, it may take India more than 100 years, in some areas, just to catch up!

16. Communication to the Political Parties of India - Party time is over!

We are writing this note with the firm belief, that you will take suitable action, to make India what it should be. Kindly help us to communicate with the Think Tanks of the PMO, MOF, RBI, Planning Commission, Congress, UPA, BJP & NDA, so that they could take suitable action.

17. Adjustment for population increase The hard facts!

If the GDP grows by 7% per year, as in 2012-2013, the per capita does not grow at 7%. It is reduced due to the yearly population increase, and due to inflation and other issues. Therefore the final per capita increase, would be much lesser. This is only, one of the disadvantages, of a ballooning population.

The above facts need to be communicated to the people of India.

<1 billion = 1000 million> <1 million = 10 lacs> <1 crore = 100 lacs = 10 million> <1 US\$ = Rs. 64 (approx)>

Agriculture: Advantage INDIA

Do not give up on **Agriculture where 80 million families are engaged!** Where **700 million people of India live in 630,000 villages!**

INDIA is blessed with sunshine, rain & river water, a warm climate and hardworking Indians who need to be '*Empowered, Trained and Educated*' with the relevant latest locally developed technology to improve agricultural productivity. For example, India has a lot of rain water but *very little rain water harvesting*. Nearly 50% of the rain falls within 30 days and the balance within 60 days. **Hence Rain Water Harvesting and bulk storage of rain water is essential and obvious.**

We tend to have a lot more of floods and drought, this needs to be balanced out. One way would be to create a series of low height dams along the rivers and create thousands of artificial lakes. Water management alone can increase the agricultural output by 100%.

China with an area nearly 3 times of India, but with *arable land much less than India*, has an agricultural *output more than double* that of India. China trains its farmers and agricultural workers by having nearly 350,000 vocational Training centers in rural China, training nearly 60 million people per year, in Forestry, Agriculture, Horticulture, Floriculture, Animal Husbandry, Farm Machinery, Rain Water Harvesting, Food Processing, Seeds, etc. List of Chinese Vocational Training Courses are available from *i Watch* at a cost of Rs. 10,000.

Food inflation is a very big component of overall inflation. As the standard of living goes up every year, people will want additional and a variety of food items. This will put extreme pressure on inflation. **Agriculture productivity and output** have to be increased multi-fold.

See details in our book *Transforming INDIA*, under '*Employment Generation*'.

The following nine articles clearly explain and prove that with '*Proper Agricultural Management*' India can increase agricultural-food production by 400%:-

1. **Blueprint for doubling food production**
2. **Grain gain**
3. **Towards a sustained higher agricultural growth**
4. **The Silent Tsunami**
5. **The Grain Drain**
6. **Farm size need not be a constraint**
7. **Energy strategy for rural India**
8. **Global warming**
9. **Getting it right on the money**

Dossier of the above nine articles are available from *i Watch*. Kindly remit a cheque for Rs. 1,000, to defray administration and other charges, along with your full name and address to *i Watch*, 211, Olympus, Altamount Road, Mumbai 400026.

Data compiled by *i Watch* for information to civil society. For India-China comparison see page 60 and website at www.wakeupcall.org.

Zero corruption

is possible only if there is fear of loss of job



Designed by Nikhil Chopra of i Watch

If India has to become an economic super power it needs **Good Governance + Effective Administration**. In countries where the governance is good the levels of corruption are low.

Citizens of countries where there is good governance can succeed with lesser difficulty. That is why Indians are successful in USA, UK, Middle East, Singapore, Hong Kong, Australia, Canada and other countries where the governance and administration is better than in India.

Workshop on Good Governance and how it benefits you

i Watch conducts interactive workshops for the benefit of the citizens of India. Details of the structure of interactive workshops— Modules of 2, 4 & 8 hours consist of the following:-

A. Basics

1. What is democracy?
2. What is the role of a citizen in a democracy?
3. Definition of Governance & Administration
4. Cost of governance of India
5. Duties of elected representatives in Lok Sabha & Rajya Sabha [MP's], State Assemblies [MLA's] and Municipalities [Councilors]
6. Duties of appointed employees in the Union Government & State Government organizations
7. Where is India in the year 2015, with respect to the rest of the world, for example China?
8. Why are we where we are? Can we do better?
9. Why do Indians succeed better in foreign countries?
10. How can we become World Class? What do we, as citizens, need to do?

good governance +
effective administration
= Zero Corruption

11. Use of Effective Human Capital. The Golden Key which can transform India into a Superpower!

B. Some benefits and spin offs due to Good Governance at the village, city, district, state and national level

Drinking water, garbage disposal, sanitation & drains, health services, prevention of slums, roads, expressways, waterways, coastal shipping, railways and air transport, Agricultural services, to support agriculture, floriculture, horticulture, primary & secondary education, vocational training, tourism, exports, agriculture, infrastructure-ports, airports, national highways, FDI inflow, population planning, employment generation, environment, law & order, corruption, industry and service sector (some or all these factors can be taken up for discussion).

C. Interactive workshops

We also conduct interactive workshops on other relevant subjects of national importance such as

1. How to increase the **GDP growth rate to +10%**
2. 'Relevant **Manufacturing Policy**'
3. 'Relevant **Educational Policy**'
4. 'Relevant **Employment Generation Policy**'
5. **Globalization** How India can grow at +10%/yr.?
6. **How to make Money** after leaving college?
7. Why do Indians succeed better in foreign countries?
8. How can we become World Class? What do we, as citizens, need to do?
9. Use of Effective Human Capital. The **Golden Key** which only can transform India into a Superpower!

World Governance & World Peace

The **3 questions** below was a result of a 2-day Global Summit on **Social Business** hosted by Nobel Laureate Prof. Yunus in KL, Malaysia, November 2013. We were 560 participants from 50 countries and the discussion was on various topics such as youth, poverty, unemployment, micro finance, skills, education, terrorism, black money, war, health care, inequality, conflict, etc.

The following 3 Questions are what I asked the Speakers and Panelists.

1. Tax Havens - why we do not need them in their present form?

World Leaders in Business & Politics talk of Ethics in Business, Corporate Governance, etc. BUT all of them allow Tax Havens to flourish in the present form?

Why should 99% of humanity suffer due to 1% or less of the world population?

These double standards need to stop as soon as possible. This money is probably deposited in these locations by less than 1% of the world population who probably control nearly 20% to 40% of the world's wealth...this is **BLACK MONEY**.

The G-22, United Nations, International Citizen Groups, etc., need to work on demolishing these citadels of blatant corruption' and see that all these funds are recycled into their respective governments, taxes paid and a small portion of this is 'recycled into areas like Education, Healthcare & Social Business for the 3rd World and developing economies of this planet.

These so called **Tax Havens** promote funding of illegal arms, terrorism, money laundering, tax evasion, covert operations, etc...

One would have no problem with any number of these so called **Tax Havens** provided they are transparent and comply with the Tax Laws of the originating country of the person who has placed funds with them.

2. Export of Arms & Ammunition since the last 67 years to the least developed countries of Latin America, Africa, M.E. and Asia... WHY? Why not export Relevant Education?

The least developed countries of the world needed

education and primary healthcare after the 2nd World War but they received exactly the opposite and very freely - Arms, Military equipment, Bombs and Hardware for destruction of human beings.

Afghanistan, Iraq and the 9/11 incident were probably an after effect of all this.

The western border between Pakistan & India is lit up at night and can be easily seen by astronauts! We in India have been shouting from the rooftops about terrorism from Pakistan, to protect the people on both sides of the political border from constant terrorism but the USA gave billions in grants and aid to Pakistan.

Most was used for arms and ammunition against India. **How sad for the two poor countries of this world with a combined population of 1.4 billion?**

Similar stories have happened and known to all, in other 3rd world countries. What a shame for the ordinary citizen?

One hears that we now have children in Afghanistan of 10-12 years old **who can beat a trained soldier** in the operation of an AK-47 but cannot read and write! What exactly are we trying to prove?

3. Estimated expenditure of US\$ 3,500 billion or US\$ 3.5 trillion per year on worldwide Arms and Ammunition... WHY spend so much for misery for all?

The total GDP of all countries is about \$70,000 billion about \$70 trillion. This expenditure on arms is about 5% of world GDP. This is **ONLY** meant for fighting each other on this little planet. Why?

The younger generation needs to ask this question. The older generation is not asking too many questions. This defense is not meant for some external invasion from outer space or for fighting the biggest problems on our little planet... like poverty, healthcare, unemployment, educations, skills, ecology, global warming, housing, safe drinking water, etc.

Even if this arms race could be reduced by 10% and the funds diverted to **Education, Vocational Training, Primary Healthcare and Social Causes**, this beautiful world of ours would be truly be what it is meant to be.....a **Paradise**.

Fiscal Governance

*SME's are the KEY!****

1. Expanding the Tax Base**
2. & Reducing the Tax Rate**
3. Reducing Corruption
4. Reducing Black Money

1. Expanding the Tax Base & Reducing the Tax Rate**

After 67 years of Independence, hardly 6% of India's population are PAN card holders, and less than 3% of the total population actually pays tax. This needs some study and action plan so as to increase the tax base. **We need to look at the MSME base.** In India we have been calling it the “**Unorganized Sector**”, where 93% of the work force exists. MSME's are 98% of all organizations.

I have lived and worked in the EU and most of the time in Germany for a period of nearly 4 years. I am also a very old member of the **IHK** (German Chamber of Commerce) and now the **AHK** (foreign arm of the IHK) or the Indo-German Chamber of Commerce in India. **IHK** has nearly 4,000,000 members out of which nearly **99.8% are MSME's**. In short, **every ENTERPRISE** whether in **Services** or in **Manufacturing** is catalogued! **99.8% are MSME's** and the balances are large companies. In fact the main purpose of the **IHK** (German Chamber of Commerce) is **to promote MSME's!** India has hundreds of Chambers of Commerce, largest being CII with 9,000 members.

In Germany and the other 36 EU countries, every enterprise whether it is a **MSME** or **large** organization **HAS to register** with the local branch of the Chamber, otherwise they **CANNOT start or CONTINUE operations**. They have to mention 1.Type of Business, 2.Number of employees, 3.Total Assets and 4.Total Sales for the year & report every year. **Hence data mining is possible.**

In India nearly **150 million MSME's** exist out of which nearly **80% are in Agriculture** and the balance **20% in Manufacturing** and **Services**. Write to us for detailed data on MSME's in the EU.

India in **2015** will have to also finally **catalogue and locate** our **MSME's** in the **Manufacturing & Services** Sectors. Most **MSME's** are **Partnership** and **Proprietorship** companies. Presently, the **Ministry of Corporate Affairs** **only registers Pvt. Ltd. and Public Ltd. Companies**. There is **no National Data Base for Partnership & Proprietary** companies!

In **2015** the present **RBI definition** of Indian MSME's needs to be modified to bring them in line with International Norms such as in the **37** countries of the **EU, ASEAN, China**, so as to make our Indian MSME's **competitive, productive, producing high quality** and become **world class**.

As per the 'Business Line' dated 3rd of June 2014**, India has one of the highest number of '**Shadow Companies**'; organizations which are not registered with any government department. The figure is quite alarming! About 127 '**Shadow Companies**' for every 1 registered company. Only Indonesia is worse off with a ratio of 1:130. **Study conducted by the Imperial College Business Department over 68 countries around the world.

I strongly believe that the time has come in India to follow such “Best Practices” as in the EU. In fact, worldwide MSME's are, as in India too, **the Dynamo of the Economy**.

2. Reducing Corruption

We need to consider a practical solution as a step of an “**Agenda for Change**” which will have a very useful and positive impact on the Indian Economy and for the people of India.

Any “Agenda” should be focused and acceptable to the masses, media, the Youth, the common man on the street, the Farmers, Political & Business and should NOT try to create another organization like a gigantic Lokpal; with powers greater than existing official or political structures.

Such agendas like the Lokpal suggested by various Groups in the past will cause political Backlash and are not practical. There are enough laws to prevent corruption. **Implementation is the key.**

We suggest ONLY a “**One point Agenda** for solving the menace of **Corruption**”.

All expenses towards revenue and capital account at the village, municipal, district, state, centre and PSU’s, **MUST** be hosted in the respective websites on a weekly basis in detail. Annual budgeted expenditure plans to be shown in detail and hosted in advance along with the actuals.

Tendering and ordering to be in the form of e-tenders. Details to be hosted on the website of the relevant organization. Efforts for maximum transparency should be encouraged. Every type of information should be in the local language for easy communication and or English as acceptable to the local people and governments.

The CAG can easily make the formats? The Institute of Chartered Accountants and or the Institute of Company Secretaries can easily make a format and send to the CAG and or local State Governments. It has to be simple to read and elaborate as far as details and breakdown of expenses are concerned.

Why should a citizen file for a RTI for public and tax payer’s money being spent by local, state and central governments on revenue and capital accounts?

All these moneys belong to the “People of India”.

100% transparency will ensure to a great extent **Reduction** if not elimination of corruption.

3. Reducing **Black Money**

Rs. 1000(44% of all currency) & Rs. 500(40% of all currency) notes should be withdrawn by the RBI. Nearly 84%** of all currency in value terms are in these two denominations. (RBI Annual Report March 2014)**. India has 1225 million people.

Pakistan, China and others are trying to pump in fake currency in these two denominations to destabilize India in many ways.

70%** (about **854 million people**) earn less than Rs. 120 per day (**\$2** per day). Nearly 40%** of Indians (about **490 million people**) earn less than Rs. 80 per day or (**\$1.25**). Even the **Food Security Act** covers about **840 million** people, who are BPL. For all of the above a **Rs. 100 currency note is OK** for running their lives, for business and trade.(as per World Bank)**.

The balance **30% of the population**, have bank accounts and or debit/credit cards.

In USA the maximum value of the currency note is **US\$100** whereas the average US citizen earns **US\$50,000** per year or about **US\$4000** per month. In India an average Indian earns **Rs. 60,000** per year or about **Rs. 5,000** per month.

In view of the above, a **Rs. 100 currency note is good enough to run our country**; if we want tax compliance and business and trade through banking channels. This will force **better tax compliance**.

It is very **disturbing to note**, that in India, a US\$ 1853 billion economy, only 82,000 people declare an annual income of more than Rs. 10 Cr. Hardly 100 lac (10m or about 0.8% of the population) people declare an annual income of more than Rs. 10 lacs. India has about 700 lacs (70m or 6% of the population) tax assesses and about 350 lacs (35m or about 3% of the population) actually pay taxes!

The Tax Base needs to be increased multifold from **3% to say 15%!** **Tax Rates can then be brought down** from the current **30% to 15%** in the next 10 years!

Section-3

Education & HRD

Where knowledge is free

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Overview

The importance of education cannot be over emphasized. It is the 2nd pillar for the stability and growth of any nation, after good governance. These twelve articles clearly prove that the most important asset of any nation is its people, provided they are educated. Human assets have unlimited potential provided they have relevant education and appropriate skills and vocational training.

Relevant education means that the people need education right from the age of two to seven in pre-primary classes where nearly 90% of the human brain is developed. School education in primary and secondary education must develop not only IQ but also SQ and EQ. All forms of higher, technical, management and other education needs to be completely decontrolled to bring in intense quality, competition, research and innovation; to make our institutions world class.

Finally the importance of vocational training which should start from the school level and needs to be intertwined with industry, agriculture and services.

Comparisons with Japan, S. Korea, Germany, China and the Asian Tigers, clearly brings out the importance of the need for world class education and training.

Mantra for Inclusive Growth: Concentrate on Human Assets

We are a family funded 22 year old NGO and work in the areas of Governance, Education, Economy and Employment. I have had the good fortune of working in Germany and Japan for 6 years; both were destroyed in the 2nd World War but rose to become the 2nd and 3rd largest economies in the world in spite of the fact that they have no mineral wealth or energy in the form of coal, oil or gas. They are only 12% the size of India. **They have high quality Human Assets!** That is their secret. The same with Asian Tigers like China, S. Korea, Taiwan, Hong Kong, Singapore, Malaysia, etc.

May I humbly submit, based on my 32 years experience in business and 22 years in the social sector that the past Governments have done a lot but it can do much more by concentrating on the following issues:-

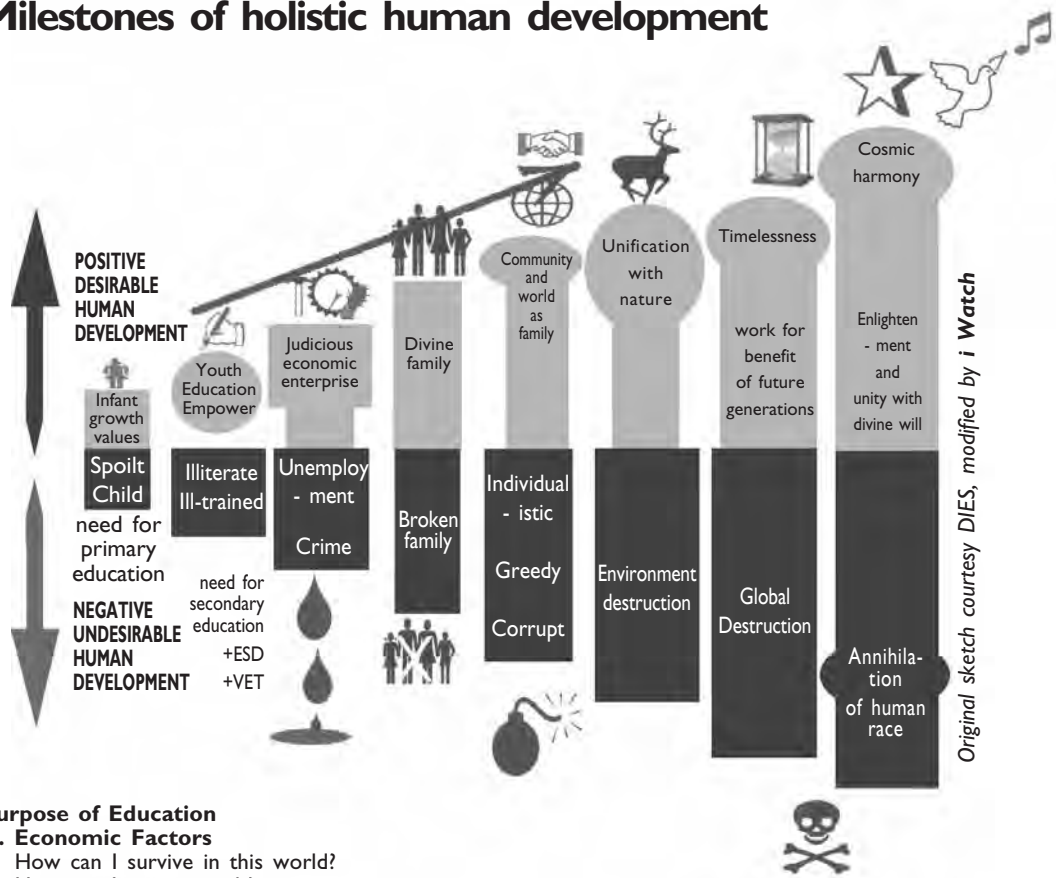
1. **Converting all Central Government websites into the main 12 Indian languages.** Regional media in India is 20 times bigger than the English media and more people will be able to understand and work with the Government (only 6% of Indians understand English. Our NGO publishes in 12 Indian languages). The INS, Indian Newspaper Society handbook at Rafi Marg, New Delhi, will give you more details. Even Google, Oracle & Microsoft deal with nearly 9 to 15 Indian languages. **The Indian constitution supports 22 languages.**
2. **Concentrating on Pre Primary, Primary & Secondary education.** Even after 67 years nearly 65% of Indians are illiterate. (Our estimates, kindly check with UNDP too). No poverty reduction is possible if people cannot even read and write! 90% of the human brain is developed by the age of 6 or 7, hence Pre-Primary education is vital.
3. **Concentrate on Enterprise Skills Development.** In the EU it starts from class 1. In India we should start at least from class 8 or higher secondary school. Whether you are self

employed or you work for others this quality is very important. **Nearly 58% of all Indians are self-employed. ESD improves the SQ & EQ of the learners.**

4. **Concentrate on Skills, Vocational Training and Employment generation projects.** India (population 1225 million) has 12,000 VET (Vocational Education & Training) centers. Switzerland (population 8 million) has 6,000. Germany (population 82 million) has 100,000. Japan (population 129 million) has 150,000; China (population 1350 million) has 500,000. Ever since Lord McCauley closed down all the Gurukul **Centres** in India in 1835, we are short of Skill and Vocational building Infrastructure in the country since then. **VET improves SQ & EQ.**
5. **Implement the Recommendations of the National Knowledge Commission.** The NKC has made very valid suggestions regarding all forms of **Higher, Technical, Medical and Agricultural** education in India. These need to be implemented ASAP. Today none of the Indian Colleges and Universities figures in the top 250 in world rankings. The way we are going in the next 10 years we will not even be in the top 500 Universities of the world. **Only competition and free markets can motivate Institutions to innovate, do research and improve quality to International Standards.** The Goddess of learning is shackled & chained!
6. **Solution offered by *i Watch* for Education for Technologies, Vocational Training and Enterprise Skills.** We offer low cost high tech Indian developed technologies for school education (**@Rs. 100 per year per student**) for interactive distance education for all forms of education and training (**@ Rs 2 per hour** with one-to-one mentoring), solutions for **Enterprise Skills Development** and **Vocational Training**. See details in our website at www.wakeupcall.org or on page 47.

The importance of education

Milestones of holistic human development



Purpose of Education

A. Economic Factors

1. How can I survive in this world?
2. How can I earn enough?
3. How will it benefit me and my family?
4. Can I start my own business?
5. Indian buying power is limited, can I export?
6. How to do things better and faster?
7. The need for knowledge & learning.
8. The need for benchmarking & improving.
9. The urge and need to become world class.
10. To excel in any particular field of activity.

B. Social Factors

1. To stabilize POPULATION growth.
2. To reduce LAW and ORDER problems.
3. To reduce the incidence of AIDS & HIV.
4. To improve SECURITY of INDIA.
5. To improve HARMONY between the people.
6. To improve personal HYGIENE.
7. To improve general HEALTH and reduce disease.
8. To improve PRODUCTIVITY.
9. To reduce pollution and improve ENVIRONMENT.
10. Find ways to work as a team for the COMMUNITY & COUNTRY.

Even after 66 years of independence, the functional literacy rate in India is hardly 30 to 63 %, based on UNDP and government of India statistics respectively.

Importance needs to be directed to human values imparted to an infant at home and then for **pre-primary, primary and secondary education** at school (P&SE). The above figure also brings out the need for **enterpreneurship skill development (ESD)** and **vocational education & training (VET)** at school, college and higher levels of learning.

- Both **ESD** and **VET** are required to generate employment and also boost the economy
- Presently the dropout rate, in India, between Class 1st to Class 12th is 88% to 90%. Very little support for the drop-outs.
- In India, only 7% of the workforce is in the organized sector and 93% in the unorganized sector
- Most of the jobs, about 97% new jobs, are created in the unorganized sector.
- The present education system in India is focussed on higher & technical education and preparing the youth for the organized sector requirements.
- In developed countries, VET is practised by 60–85% of the workforce, from ages 14 to 55.

A Tale of 3 countries, after 1947

Germany, India and Japan

Human Development is the key and not the size or quantity of natural resources of a country!



	Germany	India	Japan
Total area '000 sq km	357	3288	377
Arable land % of total	33	49	12
Irrigated land '000 sq km	5	558	26
Coastline km	2,389	7,000	29,751
Population millions	82	1,225	127
Median age years	43	26	44
Population growth rate %	-0.033	+1.606	-0.088
Life expectancy years	80	67	84
Literacy % age 15 & over can read & write	99	61	99
Secondary school enrolment %	100	25	100
Vocational Educational No. of Locations	100,000	11,000	200,000
Higher Education % passing out	40	12	40
GDP US\$ Billions	3,629	1,843	5,855
Exports US\$ Billions	1,408	300	800
Effect of 2nd World War	Destroyed	Intact	Destroyed
Rebuilding started	1946-47	1947	1946-47

In any organization or society or country to make it successful, three types of infrastructure or assets are required, viz., 1. Financial assets, 2. Material assets and 3. Human capital.

The most important out of all three is human capital, therefore in this book, we emphasize on the development of human capital, in terms of literacy, secondary, vocational and higher education.

A look at the above chart clearly shows that inspite of many disadvantages and setbacks which Japan and Germany suffered in the 2nd world war, they are the 2nd and 3rd largest economies in the world today!

Even today, both Japan and Germany manufacture the best cars in the world, eg., Lexus, Toyota, Honda, Mercedes, Audi, Porsche and the BMW! Unlike India, Japan and Germany do not have vast assets of mineral wealth, availability of energy in the form of coal, oil and gas. They do not have a temperate and sunny climate like we have.

The neglect of human capital development is the major cause of problems like population, poverty, unemployment, environment, terrorism, low productivity and even corruption and poor governance!

Singapore, Hong Kong and Dubai are also examples of excellence in our part of the world. All of them have world class facilities for Human Development. They lack natural resources and hydrocarbons.

Vocational education & training VET is the winner!

1. India in 2015

55% of Indians [660 million people] are below 30 years of age and 70% of Indians [840 million people] are below 35 years of age! India is a very young nation. What are their opportunities for employment and work?

2. India needs Pre-Primary, Primary Secondary Education, Vocational Education & Training (VET) & Enterprise Skills Development, ESD

While India needs IITs, IIMs and Medical colleges, the real requirement is for primary, secondary and vocational education and training.

India's population need basic educational facilities while at least 90% need to get into some sort of vocational training after or before high school.

Everyone cannot become an engineer, MBBS, MBA, lawyer or accountant!

3. Vocational Education & Training in Europe

In Europe the Universities are empty! In fact, some of them, are free for any one to join; (even foreigners are welcome) because very few students want to study there! University education does not necessarily prepare the youth for life; also there is no guarantee of a job after a university degree.

It is for this reason that 60% to 85% of the youth, after or before the 10th, opt for Vocational Training where they work part time [at minimum wages], as apprentices, with Industry and Trade for 2 to 4 years and study simultaneously

in a Vocational Training Institute, for learning the theory and knowledge.

This way, the business and trade get low cost manpower for 2 to 4 years, while the youth learn a new trade, both on-the-job as well theory in the Vocational Training Institute.

This combination results in World Class skilled youth. There are 3000 trade options with 15,000 modules in the EU and Australia. These vocations cover the manufacturing, trading, service and NGO sectors as well as for the disabled.

4. Vocational Education & Training — Advantage India!

If India could impart Vocational Education & Training in this manner, it would benefit all and have the following advantages:

- **Prepare the youth for a vocation of their choice.**
- **Build up a formidable work-force of international quality, which would have demand not only in India but in all countries of our planet. In India only IT training is world class. VET has and will transform India in the future. In the manufacturing and service sectors**

Importance of VET,
or Vocational Education
& Training
is still not understood
in India

Vocational education
is required in all
Higher Secondary schools
Pre-vocational classes
should start from Class 8

there are hundreds of skills and vocations for which there is a world wide shortage. For example, TV, electrical appliance repair and service. Automobile repair and service. Foreign language skills, medical and health services, nursing etc.

- **We need millions of trained people** in the area of services for agriculture, floriculture, horticulture, sericulture, fishery, healthcare, tourism industry and hundreds of skills for the manufacturing sector. We do not see world class vocational training infrastructure, even after 67 years of India's independence.
- **Reduce unemployment** by supplying world class skilled people required by the nation and for rest of the world!
- **Reduce cost and improve productivity** of services and manufacturing by providing skilled man power to world class standards. Run the country with a higher efficiency, lesser wastage and lower cost of operation.

5. Wastage of scarce resources

The scramble to study 10+2, BA, B.Com or BSc, is a waste of time! In India the scramble for college and university education is a disaster for all concerned. It seems, we are preparing the youth to become 'Babus'.

We require an entire spectrum of skilled manpower. What is the relevance of a BA or BSc or even a MA or MSc degree in today's complex economy? Probably very little, since it may be required for hardly 5% of India's population at this stage.

We are stretching the existing higher educational facilities to a breaking point. The faculty and infrastructure are not able to cope with the increasing number of college students, after they have completed their high school education.

Like 'Zombies' every one wants to join some college or the other with out a road map or plan about their future. It's a national tragedy of sorts!

6. Politicians + Government + Industry + Services + Trade + Educational Institutions need to put their heads together

As you may be in the think tank of India's education set up and are probably looking at ways to act as a catalyst to improve the productivity of Industry, service and trade as well as to make India more competitive, you may like to take up this matter of vocational education and training with the State Authorities, the Ministry of HRD, Ministry of Labour and Employment in New Delhi, the Chambers of Commerce and the relevant trade associations in India.

Importance of ESD and VET

ESD must start from Class 5

For the sake of **employment generation** and improving the economy to **International levels of efficiency & productivity** India needs **ESD & VET**.

Presently 27 million people enter the education system every year. Only 3.3 million make it to higher education. They mostly have options in *Commerce, Arts, Science, Law, Engineering, Medical and Management*. The balance 24 million, need vocational education & training (**VET**) and enterpruershship skills development (**ESD**).

97% of the new employment is in the **MSME** sector. Out of a work force of 490 million people, nearly 93% work in the **unorganized sector**. The greatest advantage to India Inc. will be if our **MSME & unorganized** sectors could get highly trained and educated manpower, which will enable them to reduce cost and improve quality to international standards. The **organised** sector needs it too!

Advantage ESD

“An **Enterprising person** is one who recognizes his own **potential** vis-a-vis the resources around him/her, and with an original approach **adds value** to the resources to convert them into **products or services**, for a profitable **economic exchange**. Enterprising persons are required in all walks of society.”

Enterprise Skills Development, ESD is vital because:

1. Enterprising people **are an asset** to the Nation.
2. Through enterprise education, students and youth will develop **alternate options** of economic careers.
3. Enterprise Education will **enhance the personality**.
4. Enterprise Education would give the youth a **positive outlook of life** and a **positive belief** in themselves. For more information on **ESD** please feel free to contact us.

ESD is required **from Class 1st to 12th** and higher, about 50 to 100 hours per year is enough.

Advantage VET

We suggest three levels of **VET**:-

1. **Level 1** — who have maximum education till class 5th. We are working with many NGO's in India. See www.IndianNGOs.com. *These courses are required for 20 million people per year.*
2. **Level 2** — who have secondary education plus high school. *These courses are required for about 20 million people per year.*
3. **Level 3, 4 & 5** — who have english medium with a 10+2 qualification, and who desire an International qualification. Choose courses from USA, UK, Australia and Canada. **Choice of hundreds of courses in different modules.** *These courses may be required for about 10 million people per year.*

India should be training a total of 50 million people per year, in VET above the age of 14 and up to 55, in different skill sets required for the domestic as well as world markets.

China already has +1500 vocational courses in position. The last one which was being finalized, when we visited China was for 'Domestic Help.'

The present 'college' system does not prepare the youth for skills sets required to run a nation nor does it provide scope for employment or enterprise!

Enterprise Skills
Education ESD,
Vocational Education
and Training VET,
can transform India to
world class standards

Develop SQ and EQ with IQ.

Indian education is mostly for IQ development. Soft skills and Human Values require SQ & EQ!

In IT & software **VET** skills are available to the Youth in India. However this **ONLY** comprises 5% of the GDP in India and 3% for the rest of the world. We need skill sets also for the **balance 97% of the world economic activity!** In Manufacturing, Trading and Service sectors.

For example the **Tourism Industry** is nearly 6 times the size of I.T., i.e., US\$ 4,700 billion per year. We should be giving it **6** times more importance than I.T., since it is a great employment generator!

We need to deliver Vocational Education & Training in regional languages and in English.

After 67 years of Independence, we cannot get an Internationally Certified carpenter, car mechanic, retailer, export-import assistant, wholesaler, mason, electrician, gardener, beautician, etc

We need many skill-sets to run a modern economy, this aspect seems to have been forgotten by our planners.

The sketches show that with **Conventional Education**, we hardly use 5% of the human brain, but nearly 90% with **ESD** and **VET**!

ESD & VET improve the SQ & EQ along with the IQ of the youth.

Conventional education uses mostly memory with Visual, sensory and speech areas.

With the introduction of **Enterprise Skills Education** and **Vocational Education and Training**, other portions of the brain are also used and energised very extensively.

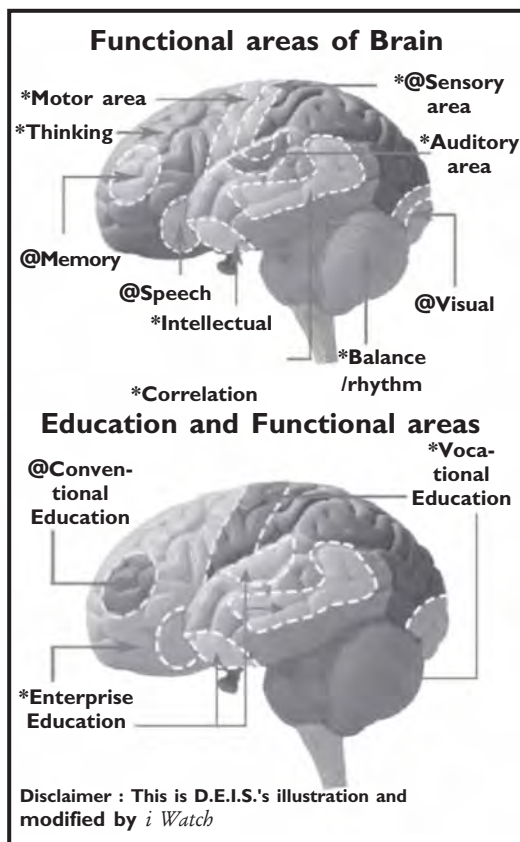
Kindly see details in the sketch shown below.

Conventional Education uses limited portion of the brain.

Vocational Education & Enterprise education uses all part of the brain.

For example, with ESD and VET, one has to use the following parts of the brain, as shown in the two sketches on this page.

1. *Motor area
2. *Thinking area
3. *@Sensory area
4. *Auditory area
5. *Intellectual area
6. *Balance and rhythm areas



Courtesy DEIS modified by i Watch

This helps in the overall development of the person.

SQ = Spiritual Quotient,

EQ = Emotional Quotient and

IQ = Intelligence Quotient.

Conventional Education uses mostly memory, visual and speech areas. **ESD & VET** use all areas of the brain as shown above. This is important for **SQ & EQ** development.

<1 billion = 1000 million> <1 million = 10 lacs> <1 crore = 100 lacs = 10 million> <1 US\$ = Rs. 64 (approx)>

Making INDIA a knowledge economy

It is necessary to first understand the entire **'Matrix'** in education. Even after 67 years of Independence, the following situation remains as far as the **Human Capital Development** of our country is concerned:-

1. **Drop-out rate** in schools from KG to 10+2 is (including those who never attended school) 88%.
2. **China** has about 2.50 million schools, while we have about 1.70 million schools in India!
3. The **'Governance'** in Government run schools is very low. In many cases teachers are absent (15% to 50% absenteeism) from schools in rural and urban schools of India and are paid full wages and perks in spite of this! Studies have shown that even the poorest of the poor rather send their children to unaided schools where fees have to be paid and not to government run free schools. The **quality of schooling** of such unaided schools is higher than Government schools although the salary of Government teachers is three to five times higher than the teachers of the unaided schools.
4. The existing **Indian definition of Literacy** (if you can write your name you are literate) needs to be amended to International Standards. The Census is based on this?
5. As per the Ministry of HRD the present **illiteracy** is ONLY 37% or 450 million people, while as per UNICEF and UNDP it is nearly 60% or 720 million people. **China has a Literacy rate of about 93%.**
6. The first step of making India a knowledge economy is **literacy** and needs to be given **AI priority**.
7. The **total amount spent on education** is about Rs. 150,000 crores per year. 15% by the Central Government. and 85% by the State Governments. The Education Cess will collect another Rs. 12,000 crores per year. This is about 3.3% of GDP. The MHRD has calculated that another Rs. 60,000 crores per year would be required only for additional requirements for Primary Education alone!
8. We estimate that another **Rs. 100,000 crores are required per year** just to have reasonable quality of Pre-Primary, Primary and Secondary education, upto Class 10th which is where the Central and State Governments should concentrate for the next 10 to 20 years, or till we have at least 95% literacy and at least 80% of the population who are completing the High School or Class 10th.
9. As per our estimates the total **expenditure for education is nearly 8% of GDP**, about 3.3% from Government and about **4.7% from private participation**. Private participation includes funding of unaided schools and colleges + bribes and capitation fees + payment for students studying abroad + tuition classes + coaching classes + private I.T. & Software training institutes. Most of this private funding is confined to urban areas where only 30% of the people of India stay.
10. About **12% of the youth** who finish the 10+2 stage (pre-university) enter the 37,000 colleges of India. 72% of all graduates are B.A. or Arts graduates. Is this relevant today? Most of these **so called graduates are not-employable**.
11. Of all new employment taking place nearly 60% are self employed. **About new Employment about 1%** is with government, 2% with the private 'organized sector' and **97%** with the 'unorganized sector' or MSMEs.
12. Presently there is **little connect between education and employment generation and quality of life**.
13. The employers associations, chambers of commerce and other business organizations are fragmented. There is no **"National Common**

<1 billion = 1000 million> <1 million = 10 lacs> <1 crore = 100 lacs = 10 million> <1 US\$ = Rs. 64 (approx)>

Minimum Program” for “education and training of manpower” in India. In most developed and developing countries the Chambers of Commerce (who represent the employers and business) Lead from the front.

14. About **28 million people are added every year** to the existing education system, which is like adding another Australia + Hong Kong + Singapore & UAE per year!
15. Presently both the Central Government as well as the State Governments are running in **Financial Deficits, of about 9% to 11% of GDP**, so the question of additional financing for education will strain not only the existing budgets but also put pressure on other sectors, where funds are being presently allocated.
16. ‘**Licence Raj**’ runs all Higher and Technical Education in India. Let us Benchmark with USA, Germany and Japan, the three largest economies of the World account for nearly 50% of the world's GDP. Do their governments exert similar controls as we have in India? Can we learn from them? There is fierce competition between the institutions in these countries for achieving excellence!
17. **China** has about **1200 Universities**, while we in **India have 572 Universities. USA & Japan have 3650 & 4000 Universities** respectively!
18. In India, the **fees** of the courses, **pay scales** to the teachers, **appointment** of the head of the Institution and the **syllabus**, are decided by the 58 or more Central and State- Government Boards of Education. Will this create innovation, **excellence** and **world class** students?
19. The **Coaching Business** is getting bigger than the **Education Business**, entrance examinations for the IITs, IIMs and a few prestigious management schools attract about 15,00,000 applications (who spend nearly **Rs.2.00 lac** each for pre-coaching, amounting to **Rs.25,000 crores** per year, for 15,000 seats. These institutions spend hardly Rs.1,100 crores per year, as their teaching budgets!
20. While 75% to 85% the youth of the developed and

developing world learn a **skill** or **competence** or **trade** between the ages of 14 to 35, by **Vocational Education & Training**, in India it is hardly covers **2% to 4%** of the workforce!

21. India has about **12,000 ITIs** (Ministry of Labour) and about 6,000 Vocational schools (Ministry of HRD), while China has about **500,000 senior secondary vocational schools!**
22. India has 300 million unemployed able bodied between the ages of 18 to 50, but **they have no skill sets** and therefore not employable! Employers in India are facing a huge **shortage of skilled manpower**. Wages and salaries in India, of skilled manpower are going up very fast. **India will not be able to take advantage of the demographic profile of its population, if the youth do not receive relevant and quality education and training.**
23. We have not seen any full scale **co-ordination** between the Ministry of Labour and the Ministry of HRD as far as VET planning on a National level, is concerned.
24. We in India, have NOT still appreciated the fact that, world wide, **Education is 7 times or 700% bigger than I.T.** or software!
25. India can become an **Educational Hub** for the world and earn **US\$ 100 billion per year**, after 15 to 20 years! We need to start now, but **remove ‘Licence Raj’ first, as was done for business in 1991!** India has **27,000** foreign students while Australia has **400,000** foreign students!
26. Because of the ‘**Licence Raj**’ in **Higher and Technical Education**, it is estimated that nearly 250,000 to 260,000 students leave India every year for studying abroad. At any given time these 450,000 students cost the country a foreign exchange out flow of nearly US\$ 12 billion per year or nearly Rs. 75,000 crores per year, **enough to build 50 IIMs or 30 IITs per year.**
27. The present **problem of reservation will not solve** the needs and aspirations of the youth. India needs a larger number of educational Institutions, seats and higher quality in the area

<1 billion = 1000 million> <1 million = 10 lacs> <1 crore = 100 lacs = 10 million> <1 US\$ = Rs. 64 (approx)>

of Higher & Technical education. Rationing, quotas and reservation can never address the actual situation. The Central and State governments are strapped for funds even for Primary and Secondary education. **The solution lies in complete decontrol of all forms of Higher & Technical education;** the same way as business was delicensed in 1991!

28. Since 1947 we have tried reservation and controls in the allocation of **steel, cement, colour TV's, airlines tickets, cars, scooters**, etc and have failed. **Only increase of supply and decontrol has finally solved these issues.**

If India has to become a Knowledge Economy we need to do the following:

- A. Aim for **100% Literacy** in the next 10 years
- B. Decontrol and involve the management of all **primary schools** to the **local bodies** such as Panchayats, Village Groups, Municipalities and local Citizen Groups. **Allow the community to manage.**
- C. **Consider the use and issue of 'Education Coupons'** for school children, so that they can choose the schools of their choice and funding from the government, which would have been dispersed for the funding of Government run schools in rural and urban India, should be paid out.
See www.ccsindia.org
- D. Scrap '**Licence Raj**' in higher and technical Education, after and including class 11th, to allow innovation, creativity and excellence in Education.
See www.epsfi.org
- E. **Ensure that 80%** of the population in the age group of 14 years to 50 years goes in for some sort of relevant **Vocational Education & Training.**
ee www.wakeupcall.org
- F. Start **Enterprise Skills Education, ESD**, from Class 5th to the 12th. This will teach the youth

about how the real world works. Only 100 hours per year required. More than 60% of the work force in India is self-employed.

See www.deispune.org

- G. **Upgrade all Higher Secondary schools** for Vocational Education and Training and have full time counsellors. Nearly 2,25,000 HSC schools need to be extended to Cover VET.
- H. Have a **dynamic interaction between all stake holders**, Academia-Industry-Business-R&D-Chambers of Commerce-Student bodies-Parents organizations-Civil society and NGOs. Chambers of Commerce, who represents the **employers and business, must lead from the front.**
- I. **Allow private finance and participation** in all sectors of education, till we reach the goals as mentioned under item 8 in section one above.
- J. **Allow tax breaks and incentives** for private and NRI funding, for the next 20 years or till we achieve bench marks as mentioned under item 8 in section one above.
- K. The Central and State Governments must change their role to that of 'Enablers' from the existing role of 'Controllers'

Decontrol and deregulation of Higher, Medical and Technical education will bring fierce competition, lower cost and higher quality in education! Innovation and R&D will follow!

Education matrix of India

Preamble

1. Rs 90,000 crore* per year is repatriated out of India, for nearly 4,40,000 Indian students studying abroad. (*estimated figures).

These funds are enough to build 30 IIT's or 50 IIM's per year!

2. Rs 6,000 crore is the yearly budget of the University Grants Commission, **UGC**, in New Delhi.
3. Rs 25,000 crore* per year is spent by nearly 15,00,000 students trying to arrange and learn for the entrance examinations into the 15 IITs and the first 20 top IIMs and Management Institutes. ***Selection rate is hardly 1% against nearly 10% in Ivy league colleges such as MIT, Harvard, Cambridge & Stanford.** *(estimates)
4. Rs 100,000 crore* is spent by Indians, every year, for import of 600,000 kgs. of *Gold. *So there is enough money to be spent by Indians for things they want.* *(estimates).
5. Higher education is subsidized, while we still have 430 million as per GOI and 630 millions as per UNDP who are illiterate! **Even after 67 years of Independence we have still not taken the first step in the path of education.** The present definition of an 'illiterate', as defined in India, needs to be changed.
6. Why should we pay only US\$ 80, per month, as fees in the IITs and depend on hand outs of the Government, when our youth must pay US\$2,000 to US\$5,000 per month fees, in equivalent Institutions in the USA, Canada, Australia, Singapore and UK?
7. The drop out rate between the Class I to the Class 10+2, is nearly 88% in India. (Includes those who do not attend school) The present system is designed ONLY for the balance 12%. **How are the balance 88%, who drop out, supposed to manage?**
8. The present system puts in too much emphasis for the development of **IQ** [only 5% of the brain is used] and not enough into **SQ** and **EQ**.

9. We do not seem to be preparing our youth to face the International challenge of an open economy, which is already happening. One can find engineers, accountants, lawyers, MBA's, graduates in Science, Commerce and Arts—but no skilled manpower in the 3,000 different fields required by enterprises, to run the nation! People are available. **Most of them are not employable in India or abroad!**
10. Education and Training is a life-long process and not meant to stop at an age of 20 or 22! In the progressive countries of the world, nearly one month per year is reserved for training/re training and re-education, right up to an age of 55 or 60. **The advantages of Training have still not been understood by the people of India.**
11. Education in India is still considered as a social cause only. **Fortunately, the politicians have recognized education as a good and lucrative business, as many of them are running a large number of Engineering and Medical colleges!**
12. The problems of poor quality in education and training will not go away by controls, but by de-controls. High Capitation fees are there because of the number of seats available are much less than the actual demand. **Market forces, supply and demand should balance the existence and growth of Educational Institutions.**
13. Innovative methods for funding of new educational infrastructure are not being considered. We need **10-15-20-year-low-interest-tax-free-infrastructure-bonds** for the funding of education.
14. In a developing nation like India, the higher you study, the more the subsidy you get from the state. **Why should B. Com., B.Sc. B.A., etc be subsidized?**

Relevant education
is the key

<1 billion = 1000 million> <1 million = 10 lacs> <1 crore = 100 lacs = 10 million> <1 US\$ = Rs. 64 (approx)>

License Raj in education must go!

Recommendations

1. Higher education should be 'de-licensed'. AICTE should become a 'enabler' rather than a 'controller'. *License Raj in Education should go*, it is not serving any purpose, only a reason to stifle the growth of all types of higher education in India, and discourage excellence. **Quality is achieved only with freedom.**
2. All subsidies for higher education must be removed. These funds should be recycled for Pre-Primary, Primary, Secondary, High School, ESD and VET only.
3. Both ESD and VET promote higher levels of SQ and EQ. Many students, who do higher studies, as they work, understand how the world works. Here kids are doing higher studies without understanding the environment, maturity is not enough. Some times quality is poor, so is the confidence levels.
4. Foreign language, besides English, is a must. Eg., German, Japanese, Korean, Chinese, Spanish, Russian, French, etc...
5. Work experience is a must, not only summer training. At least +2 years, after college for MBA, and another +2 years after Masters, for a PhD.
6. Teachers and Professors must 'shunt' between college and enterprise. *One cannot stay put only in one place.* Stagnation leads to obsolescence!
7. Funding of all types of higher education needs a paradigm shift of thinking. Privatize to the maximum. Allow for tax incentives in educational infrastructure for the next 20 years. Best teachers must be attracted to work in Educational Institutions. Reservation of up to 35% of the seats can be kept for merit-cum-poverty.
8. Education is BIG Business any where in the world. About US\$ 9,000 billion per year, **nearly 7 times the size of IT and software.** If we can pick up only 10% of the world business, it will increase our GDP by 40%! This can be achieved in the next 10 to 15 years. Why should we allow USA, UK, Australia, Singapore, Hong Kong, Malaysia or Dubai to take away our business and jobs?
9. India is ideally suited to become a HUB for education for Asian countries. Australia earns nearly \$14 billion per year on foreign students. [this is nearly 5% of the entire export of India and nearly 25% of India's software exports]
10. Quality will improve only by deregulation and NOT by regulation and controls. Let there be a 100 IITs or a 100 IIMs. The good institutions do not have to advertise and promise placements etc. The market knows best. Interaction between Institutions and Industry-Research must be magnified 10 fold.
11. Indian Institutions must bench mark with the rest of the world and NOT only with each other, in India! Foreign accreditation is required to improve 'Governance'. ISO 9000 is not enough. Look at Six-sigma, etc.
12. Think Global but Act local! Which means, that we should get all the Best Ideas from all over the World and implement them to Indian conditions, **preserving our culture and heritage** for achieving the Best Results for the people of India.
13. We should conduct a proper survey with the 260,000 students who leave India every year, to find, out why are they leaving and not studying in India. This will answer a lot of questions raised by us and also fortify our conclusions.
14. We should benchmark India with the other developed free nations of the world such as the USA, UK, Japan and Germany, which account for nearly 55% of the World's GDP and find out how the higher and technical, including medical, education are organized in these countries?

<1 billion = 1000 million> <1 million = 10 lacs> <1 crore = 100 lacs = 10 million> <1 US\$ = Rs. 64 (approx)>

Make India an international hub for higher & technical education

1. The 'Goddess of Learning' should be allowed to be Free!

If India has to become a Dynamic and Powerful Nation in the future, the Goddess of learning, 'Saraswati' will have to be deregulated, like the Goddess of wealth 'Lakshmi' was in 1991.

2. Profit making in many areas excepting Higher & Technical Education? Why?

After 1991, it is free to make any amount of profit in any of the following sectors of the economy:-

1. Whiskey, Rum, Gin, Vodka, Brandy, Beer
2. Cigarettes, Cigars, Bidis, Gutka, Tobacco, Paan Masala & Lottery business
3. Tuition Classes, Coaching Classes, I.T. and Software Training & Coaching Classes

3. Government is finding it difficult to finance Primary & Secondary Education

The present expenditure on education by the centre and states is Rs. 150,000 cr. Education Cess collects another Rs. 12,000 Cr. (Total 3.32% of GDP). Private initiatives in the field of education is estimated to be another 4.7% of GDP and includes overseas education + Capitation Fees + Tuition + Coaching + unaided schools and colleges + I.T. training and coaching classes. Private initiative benefits mostly the 30% urban population of India. Education should be considered as an investment for the Nation and not as a cost. The spin offs are multifold in Human development as well as Nation building.

4. Make India an International Hub for Higher & Technical Education (H&TE)

India has the advantage of a PPP, purchasing power parity of about Rs. 16 = US\$ 1. Countries like tiny Singapore (population 5.3m) are planning to have 150,000 foreign students. Australia (population 28m) has nearly 400,000 foreign students and earns about A\$14 billion per year! India (population 1,225m) has about 27,000 foreign students and has NO PLANS for any regulated increase, because of 'Controls' in Higher Technical Education.

Lack of capacity and quality encourage 260,000 Indian students to leave India every year for foreign universities resulting in a foreign outflow of about Rs.75,000 Cr. per year. Assume 50% for 2 year Masters and 50% for 4 year undergraduate course, at any given time 460,000 Indian students. Some leave as tourists. Sufficient to build 50 IIMs or 30 IITs per year!

The RBI figures indicate about Rs. 30,000 Cr. per year outflow. Many Indian students are supported by overseas NRIs, PIO's, friends and associates who pay directly for Indian students studying abroad.

If H&TE was deregulated, like I.T., there is no reason why India would not earn US\$ 40 to US\$100 billion per year and provide at least 10 to 20 million additional jobs in the field of education alone! The spin-offs in tourism, joint ventures and trade with other countries will be enormous. Let us give a level playing field to Indian Institutions before we open up the education sector to foreign players as per WTO and GATT.

5. Higher & Technical Education needs Deregulation & Decontrol

If Indian education has to achieve excellence, quality, innovation and cutting edge R&D the first step would be to deregulate and unchain the **Goddess of Learning**. Competition will induct quality, lower cost, innovation and excellence. Capitation fees will vanish once H&TE is decontrolled & 'Controls' are removed. The actual fees will come down due to competition.

Poor students could get highly subsidized education. Deserving poor students will get scholarships and loans!

Student bank loans are only Rs. 40,000 crores at present; this has a scope to go up to more than Rs. 100,000 crores once the quality of education improves within the country, inline with international standards. India requires additional 15,000 to 20,000 PhDs per year, the present structure may not be able to deliver. R&D in India is suffering!

Paradox India - 300 million are...

Unemployed or Underemployed Yet there is a shortage of trained man power ?

We would like to share a few thoughts regarding **HR development & training** in India with respect to, say China, the EU and the USA. Where are we now? & where we need to go from here?

1. Since 1947, **HR** is really not a very important subject, as far as the BIZ organizations or Chambers of Commerce are concerned. Central & State Governments are now beginning to appreciate the importance of **high quality** of HR. Chambers of Commerce do not give sufficient importance to HR, many have an IR committee, which is more for settling labor disputes! **CII** has national committees in **Education & Skills/HR/IR**. Within CII, nearly 24 people are involved with **Human Resource Development**. In contrast, say in the German Chamber of Commerce, nearly 20 to 25% of the manpower is involved in manpower training and development
2. **Germany**, population 82 million, has **100,000 Vocational Training Institutes** for a work-force of 42 million and nearly 500,000 companies are involved in practical training as well as handling of apprentices. About 200,000 professional experts from different sectors of the economy are registered and are used for imparting theory and practical hands-on-training to about 3,000,000 people per year.
3. Even a small country like **Austria**, population 8.5 million, has **5000 centers**, training 300,000 people per year and 38,000 companies provide practical training. No wonder that they have the lowest unemployment rates and one of the highest labor productivity in the EU.
4. In the USA and the EU nearly all Vocational Education & Training is in the PPP (Public- Private-Partnership) mode. About **70% financed by the private sector** or employer's organizations/local community and 30% by the Central and State Governments. This ensures a steady stream of trained and qualified man power for all enterprises. In the USA these are called **Community Colleges**, where nearly 12,000,000 people are trained per year.
5. India has 12,000 **ITI's and ITC's**, which are

under the Ministry of Labor & Employment, where 3,100,000 people are trained per year. During the last five years it has come to light that nearly 19 other Ministries of the GOI are also engaged in some sort of manpower training & education covering an additional 3,200,000 people per year.

6. **China has 500,000 vocational institutes**, out of which nearly 70% are in rural areas. The total number of people trained within **China is about 80,000,000 people per year**. It is therefore not surprising to note that China with arable land much less than India produce's nearly 150% more food grains, although it has a very harsh climate.
7. India has a **work-force of about 490 million** people, out of which nearly **19 million** work with the '**Organized Public Sector**'. **11 million** with the '**Organized Private sector**' and about **460 million** with the '**Unorganized sector**'. Are our **HR Forums** addressing the 2nd category of employees in the 'organized private sector representing only 11 million employees'?
8. **German** chambers of commerce have a **common-minimum-program** regarding **HR**. They have more than 4,000,000 members who are categorized in different sectors of the economy, about 1100 sectors. In India we have a large number of all-India Chambers (like CII, FICCI & ASSOCHAM), as well as state and city and trade or product chambers of commerce. The largest being CII with 8,000 members and an additional 25,000 members through affiliations of different trade and business groups as affiliate members.
9. Where are the **100,000,000 MSME's** accounted for who account for nearly 460 million workforce of the 'Unorganized Sector' and represent nearly 93% of the work force?
10. **Primary Education** has not been able to reach most of the Indian population. The literacy rate is estimated to be 61%, against 93% for China. China has nearly 2.5 million schools against about **1.7 million in India**. The Right to Education Bill **2005** has been passed by parliament in 2009.

11. India has hardly 2,25,000 **higher secondary schools**, completely inadequate for our vast population. The school drop-out-rate between KG and 10+2 is estimated to be at least 88% considering also the ones who never went to school. Kindly see '**Education in India**', a note prepared by www.wakeupcall.org. Please ask us for hard copies?
12. The 12% who do manage to cross the 10+2 stage enter the 40,000 colleges of India. **Nearly 75% of all graduates are doing B.A.!** Balance 15% is doing B.Sc and B.Com. Hardly 10% opt for engineering, medical, IT, management and other professional courses.
13. Higher & Technical/Medical education is highly controlled, leading to low quality, low capacity and a flight of nearly 260,000 students per for **higher overseas education**. This puts a drain of nearly Rs. 75,000 crores per year **on our balance of payments**, sufficient to build 30 IIT's or 50 IIM's per year! **Kindly see 'Goddess of Learning' at www.wakeupcall.org. Please ask us for hard copies?**
14. **44 million** unemployed and educated youth are registered with the Employment Exchanges. Another **260 million** of age group 15 to 50 are underemployed / unemployed but not registered!
15. **This pool of nearly 300 million people are our so called 'demographic dividend'**. Most of them are NOT employable as they have no skills which are relevant to our present day economy. Many of them are illiterate, of poor health and many with physical handicaps!
16. Because of the above situation, our wages and salary, especially in the 'Organized Sector' is rising much faster than the annual inflation rate. In many cases we are becoming un-competitive, or our margins are being squeezed by the other international players in
Asia, Latin America and Africa, to name a few.
17. Last, but not the least, three types of Resources are the **Vital Ingredients** of any Strong and Vibrant Economy - 1st **Human Capital**, 2nd **Financial Capital** and 3rd **Material Assets**.
18. It seems that during the last 67 years, our emphasis has been on the last two, that is Finance and Material assets, although the real driver is the 1st or **Human Capital** or **Human Resource**.

Our suggestions for effective use our ample Human Resources are:-

1. **Create awareness** about where we are and where we need to go. See www.wakeupcall.org
2. Please see our **142-page book** titled - **Transforming INDIA**, for some data, ideas and suggestions. We have 12 articles on Education & HRD and 14 articles on Employment Generation.
3. All **Chambers of Commerce** need to come **together** on one platform, for **National HR issues**.
4. Emphasize to Central & State Governments the **importance of HR** with **relevant education and training**.
5. **Give examples of the Asian Tigers**, China, Malaysia, Vietnam, and Indonesia. Germany & Japan (which were destroyed in the 2nd world war). S. Korea which had a 10-year war with N. Korea.
6. Start **Enterprise Skills Development**, ESD, from Class 8th
7. Start **Pre-Vocational** Classes from Class 8th
8. **Convert and Extend** all existing 2,25,000 higher secondary schools and 40,000 colleges into Vocational Centers in PPP mode?
9. **Connect Academia to business enterprises in each state**.
10. Define the **Skills required** for the next 10 years, on a moving target basis, in **Agriculture, Manufacturing and Services**
11. **Decontrol** all Higher, Medical, Agriculture & Technical education in India.
12. But, **let the existing controls and quota, etc continue** in all Government funded and Government aided Institutions. Govt. should concentrate on pre-primary, primary & secondary education!
13. Remove '**License Raj**' for new Institutions. **Make India an International Hub in Education**.
14. Education is nearly **7 times bigger** than IT. and software.
15. Education is also a **big employment generator**.
16. Australia has 400,000 foreign students, Dubai has 50,000. Singapore is preparing for 150,000. **India has 27,000 foreign students**.
17. Consider 20 years of Tax-Breaks for private investments in all forms of **Higher Education & Training**.

Three proposals for Empowering the YOUTH

In landlocked countries like Austria and Switzerland, the total population is only 15 million, less than the Indian state of Kerala. Yet both countries combined have about **10,000 Vocational Training Centres** where about 100,000 youth are trained every year to world class standards. Both these countries have *nil* minerals and *nil* hydrocarbons like oil, coal or gas yet their GDP is about 23% and 33% of India respectively, with only a population equal to Delhi or Mumbai city!

The main aim of our book is to **change the mind set towards skills development and vocational training.**

High quality educated and trained human resource is one of the main reasons for their success.

India has less than **12,000** vocational centres. Germany has about **1 lac** centres and China about **5 lac** centres.

1. Transforming INDIA - by empowering the people, especially the YOUTH

Our work is dedicated to the youth of India. Focus areas are **Governance, Education, Economy and Employment.** Only about 8% Indians understand English therefore all our publications are available in English and 12 Indian languages — Hindi, Urdu, Punjabi, Assamese, Oriya, Bengali, Gujarati, Marathi, Tamil, Telugu, Malayalam and Kannada. See details at www.wakeupcall.org. Kindly see page 100 for details to sponsor this book in any language



This book has been introduced to you as you are a passionate Indian and/or World citizen with a dream to make India into a developed and balanced country with inclusive growth.

Our main focus is on the '**Common Citizen**', especially the bottom 90% of the population. The route to transformation is empowerment of the people, man or woman through the process of **Relevant Education & Vocational Training.** You will notice from page 102 that we are involved in Macro Reforms at the Centre in the field of education and skills. Projects planned during 2014-2016 are explained on page 95.

2. For Classroom Education — e-Class



for class I to class 10
for schools

e-Class is for normal classroom type of teaching and **uses only TV's**, no PC,

Education

no keyboard, no mouse, no CD and no keyboard required. For example, cost of course-ware, training and installation per school is about Rs. 90,000 (US\$ 1500) per year for all subjects from class I to 10.

The operating cost is about Rs. 5 to 10 per student per month; which even the poorest school in India, can afford plus the advantages of capacity building at a rapid pace.

Presently, course-ware as per State of Maharashtra Board is available, in both Marathi and English mediums. Work is in progress for all States of India in all Indian languages. The first objective is to achieve 100% functional literacy and teachers training. Please see the full demos at www.e-class.in and at www.e-classonline.com

e-Class technology is ideal for high quality capacity building at a low cost for rural, semi-rural areas.

This technology can be used for e-Class in schools, vocational training, management, engineering and other subjects in higher, technical and medical education.

3. For Distance Education — Interactive e-Teaching using 'Dynamind'

e-Teacher for e-Learning



Dynamind is a teaching platform developed by i2K Solutions for any type of interactive distance education. It can handle one-to-one mentoring, including online

assessment, feedback, remedial measures and questions /answers, scalable to any extent, can handle e-Content in 65 languages. It uses **Artificial Intelligence & Cloud Computing.**

Dynamind uses e-Content. Can be used for schools, colleges, vocational institutions, corporate training programs, etc. The end user organizations will have to develop a one-time suitable web-enabled e-Content for e-Teaching.

The Dynamind e-Teacher & e-Trainer can reach out even to the remotest parts of India or the rest of the World, as long there is internet connectivity. Please see demos at www.i2k.in.

The cost is as low as Rs 80 per day or Rs 25,000 (US\$ 300) per year per person!

It uses the internet as a resource library and has collective intelligence features. Presently being used for PCM class 5, 6, 7, 8, 9, 10, 11 and 12 coaching + IITJEE & AIEEE coaching. See www.aasanka.com

Learn to read and write in 40 to 60 hours!

UNDP says 600 million are illiterates in INDIA!

No country can ever get developed without the citizens being literate.

The problems of over-population, AIDS, law & order, communal harmony, poverty, unemployment, productivity improvement, health, etc can only be solved, as soon as possible, once our people can learn to read and write and get educated!

In the last 67 years we have not been able to achieve this.

Countries in Asia, like China, Malaysia, Indonesia, Thailand, Taiwan, Korea and others took urgent steps for making their population literate, with spectacular results.

The sooner India achieves 100% primary literacy, the better it is for all of us! TCS, see www.tataliteracy.com, has developed an innovative and quick method of teaching Indian Languages within 40 hours. They have truly used Information Technology for imparting 100% primary literacy to the people of India, in a very easy and cost effective manner. **We, are only enabling the good work done by TCS.**

Details about this method are mentioned below:-

- The time required to learn other Indian languages is the same as for Hindi.
- **One must be able to speak the language** that one wants to learn with this method. For example, Hindi speaking people can only learn Hindi, by this method. Presently **Hindi, Marathi, Tamil, Bengali, Telugu, Gujarati, Oriya and Urdu** are available.
- Age 7 to 70 years
- Class size about 100 to 150 people at a time
- One **PC + Projector + UPS** per class of 100 is required. Price about Rs.1 lac per set
- **Teach 8000 people** per year with one **PC Set up.**
- The **PC+Projector+UPS combination** is an ideal equipment for a **Learning Centre**. It can be used for other uses such as Primary & Secondary Education, Vocational Education, entertainment, community learning in water harvesting, health etc
- The cost of imparting functional literacy, operating only 6 to 8 hours per day and teaching only 8000 people per year comes to about Rs 200 to 300 per person. Includes all inputs on capital and revenue costs. 8 batches per day, of 100/150 people per class, of one hour per class per day. 800/1200

people per day or a total of 64 batches per year. Batches can be switched on alternate days.

- Literacy primer of that language is required, as a supplement.
- Pupils should have ample writing paper, pens and pencils, for experimentation and writing practice.
- At the present rate of development some districts of Uttar Pradesh and Bihar may take about 100 to 140 years to achieve 100% literacy. These are based on UNDP. The Government will however not agree to these figures!
- **Regular teacher is NOT required.** Any person, student, housewife or adult with 6th or 7th class education in the language being taught, is good enough to be the teacher.
- **No Teacher training required.** One can learn to teach this program in a few minutes.
- **Computer literacy is NOT required** to teach this program. The student or teacher, only have to move & operate the mouse.
- This is a multimedia program, in colour, sound and text. One can move forwards or backwards as one pleases. Any normal teacher would get tired of repeating the words and alphabets, again and again. However the PC never gets bored or tired!
- This system teaches the words directly, without any mention of grammar or vowels!
- There are about 500 words in every language which are mostly used for day-to-day conversation, reading and writing. This program tries to teach these important words.
- After this course, people can read a newspaper in their mother tongue and write a few short sentences.
- It builds up a lot of confidence and encourages people to learn further. It would also help people in vocational training and education, where one has to learn skills and vocations.
- In the 21st century, India cannot be isolated, from the rest of the world, with nearly 600 million people who are illiterate. Government figures indicate that **ONLY 380 million** are illiterate, World Bank figures are higher, as mentioned. *Whether it is 380 million or 600 million people, let us change this situation!*
- **TCS will give you the information** about the large number of centres running in different states.

Section-4

Economy & Enterprise

*Where the world has not been broken up into fragments
by narrow domestic walls & truth
Where words come out from the depth of truth*

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Overview

This assortment of eleven articles has a very focused and important message for the reader. Firstly, the importance of MSME's where nearly 94% of our work force is engaged. MSME's are the dynamo of any nation and these organizations in India number nearly 100 million. 80% in agriculture, balance 20% in the manufacturing and services sectors. Everything possible should be done to make these, world class.

Secondly, the importance of other sectors of the economy, besides IT and software has been highlighted. Thirdly, the importance of agriculture, exports, labour reforms, tourism and manufacturing, to name a few sectors which have been neglected and which have a huge latent potential for the substantial increase in the employment generation as well in the real GDP growth of India.

To highlight all of the above, comparisons of economic and social indicators have been made with China, BRIC countries, some EU and Asian nations.

The latent potential of the Indian economy needs to be revitalized. It has huge and multifold potential. This would only be possible if the first two pillars of the economy, good governance and relevant education and training of its people are given importance as explained in the earlier sections.

Difference between Poor & Rich

1. The difference between the poor countries and the rich ones is not the age of the country.
2. Countries like India and Egypt, which are more than 2000 years old and are still poor.
3. On the other hand, Canada, Australia and New Zealand, were unknown 100 years ago, and today they are developed and rich.
4. The difference between poor and rich countries does not reside in the available natural resources.
5. Japan has a limited territory, 80% mountainous, inadequate for agriculture and cattle raising, but it is the second largest world economy. The country is like an immense floating factory, importing raw material from the whole world and exporting manufactured products.
6. Another example is Switzerland, which does not plant cocoa but has the best chocolate in the world. In its little territory they raise animals and plant the soil 4 months per year. That not being enough, they produce dairy products of the best quality. It is a small country that transmits an image of security, order and labour, which made it the world's 'safe deposit vault'.
7. Executives from rich countries who communicate with their counterparts in poor countries observe that there is no significant intellectual difference.
8. Race or skin colour are also not important: immigrants labeled lazy in their countries of origin are the productive power in rich European and other developed countries.
9. What is the difference then?
The difference is the **attitude** of the people, formed along the years by **education** and **culture**.
10. **On analyzing the behaviour of the people in rich and developed countries, we find that the vast majority follow the following principles in their lives:**
 - a. **Ethics, as a basic principle**
 - b. **Integrity**
 - c. **Responsibility**
 - d. **Respect to the laws and rules of the land**
 - e. **Respect to the rights of other citizens**
 - f. **Loving their work**
 - g. **Strive for saving and investment**
 - h. **Will to be of superior action**
 - i. **Punctuality at work and play**
 11. **In poor countries, only a minority follow these basic principles in their daily life.**
 12. **We are not poor because we lack natural resources or because nature is cruel to us.**
 13. **We are poor because we lack attitude.**
 14. **We lack the will to comply with and teach these functional principles of the rich and developed societies.**

Amazing Maths!

If:

A B C D E F G H I J K L M N O P Q
R S T U V W X Y Z

Is represented as:

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
17 18 19 20 21 22 23 24 25 26

Then:

K-N-O-W-L-E-D-G-E

$11+14+15+23+12+5+4+7+5 = 96\%$

And:

H-A-R-D-W-O-R-K

$8+1+18+4+23+15+18+11 = 98\%$

But:

A-T-T-I-T-U-D-E

$1+20+20+9+20+21+4+5 = 100\%$

The real and virtual India

India's diaspora is important

	The Real India	The Virtual India
1. Who stays here?	People of India in 36 states	NRI's & PIO's in 5 continents
2. Gross domestic Product	US\$ 1853 billion	about US\$ 400 billion
3. Per Capita Earning	US\$ 1530 / year / person	about US\$ 10,000 / year / person
4. Savings Per Year	US\$ 100 billion**	about US\$ 70 - 80 billion**
5. INDIA's external debt	US\$ 267 billion	N.A.
6. Total FDI last Year	US\$ 40 billion	N.A.
7. Population	1229 million	25 millions

1. Understanding the real and virtual India!

There are two India's, one where we live and the other is the **Virtual India**, with an estimated GDP of US\$+ 400 billion per year, where about 25 million NRI's and PIO's live.

Their hearts are in India and they are emotionally tied to India. If we can attract them and woo them, they could be a good source of funding projects for India's growth plans.

The Chinese have learnt the art of wooing and managing their NRCs who number about 55 to 50 million. Last year the NRCs invested about US\$ 70 billion into China + Hong Kong + Macau. India, in spite of its best efforts, received only US\$ 1 billion from NRIs last year!

India imports nearly US\$ 10 billion worth of Gold every year. This means that we have imported nearly US\$ 180 to 200 billion worth of Gold, in the last 20 years, since liberalization of the economy. Prices have also gone up!

We should try to find ways to 'funnel' this retail investment into more economical areas, to benefit the nation and it's people

2. How has China managed to get large FDI inflows from the NRC's?

Maybe, there is a lesson to be learnt by us, as to how China is able to woo its NRC's!

The largest banks in Hong Kong, HSBC and Standard Chartered, may be able to throw some light on how the NRCs have been able to invest so much in to China and Hong Kong.

3. India's POT of GOLD —how can we get it back?

It is estimated that a large amount of "Indian Money", is lying outside India, due to poor governance

and administration of India and due to past regimes of controls and high taxation. If India can put its **"House in Order"**, to near world class standards, a substantial part of this money could easily come back to drive the Indian economy.

Unofficial estimates of Indian funds lying outside, range from US\$ 400 billion to US\$ 1,400 billion! India's total foreign debt is about US\$ 267 billion.

The interest rates are very low in the international markets and interest rates are also dropping in India. NRI's and PIO's would be interested to invest in Indian paper with reasonable rate of interest and attractive tax incentives.

The Indian Central and State Governments should plan for **10-15-20-25 year Infrastructure Bonds**, with a coupon rate of 6% to 8% both for domestic Citizens as well as for NRI's, with tax breaks and incentives. Or it could be a *floating rate*, based on some standard base rate, + a premium of 100 to 150 basis points. **India requires US\$1500 billion for Education, Health Care, connecting the Water Ways and Rivers, for Ports, Airports, Railways and Roads.**

After the 2nd World war, when Germany was devastated, the German Government came out with a similar scheme to build the Nation. China has had a novel scheme for many years. *It may be a good time to consider such proposals. The present rate of borrowing for Infrastructure Projects is too high!*

4. Only Good Governance and Effective Administration can attract higher FDI into India and induce money to flow back.

- FDI—Foreign Direct Investment
- NRI—Non Resident Indian
- NRC—Non Resident Chinese
- PIO—People of India Origin
- US\$ 1 billion is Rs. 6,000 crores
- N.A not applicable
- **estimated figure

<1 billion = 1000 million> <1 million = 10 lacs> <1 crore = 100 lacs = 10 million> <1 US\$ = Rs. 64 (approx)>

Poverty line and related data

The World Bank's definition of the poverty line, for under developed countries, like India, is US\$ 1 per day per person or US \$365 per year. This is being revised to US\$ 2 per day, per person. As per the Government of India, the poverty line for the urban areas is Rs. 780 per month and for rural areas Rs. 960 per month, i.e. people in India who earn less than Rs. 32 to Rs. 26 per day.

As per Government of India, this amount will buy food equivalent to 2200 calories per day, medically enough, to prevent death. At this level of earning, even in a poor country like India, survival on Rs. 26 or Rs. 32 per day is a nightmare!

This actually translates to Rs. 10,000 per year or US\$ 200 per year. On what basis have our planners decided this definition of '**poverty line**'? Does it

mean that the person will get enough food to stay alive? How and where is he or she supposed to cook it?

What about the minimum needs in education, housing, health services, clothing, and other basic necessities?

The minimum wages in India, vary from state to state and city to city, and average Rs.3000–5000 per month or Rs. 36,000 – 60,000 per year or US\$ 700 – US\$ 1200 per year India's per capita is US\$ 1,530 per year. (China's is US \$ 5,210).

If we could Provide Urban Amenities in rural areas (PURA) in every village, it would improve, education, health, family planning, agriculture, animal husbandry, GDP and reduce migration from villages to cities.

Earnings of different types of employees in India	Converted into Rs. /month
1. Average cost of employee* in AIR-INDIA	Rs. 100,000
2. Average cost of employee* in MARUTI UDYOG	Rs. 45,000
3. Average cost of employee* in the Mumbai Municipal Corp.	Rs. 25,000
4. Minimum starting salary in the Fire Dept. in Mumbai	Rs. 15,000
5. Average earning of an Indian — US\$ 1530 per year or about (This is based on a GDP of US\$ 1853 billion and 1.21 billion people)	Rs. 6,375
6. Minimum earning required, as per World Bank, to live at above poverty line, for underdeveloped countries like India, China etc, about US\$ 1 per day or US\$ 30 per month. New definition is US\$ 2 per day or US\$ 60 per month.	Rs. 1800 Rs. 3,600
7. Minimum wages, as per Government of India, for all the States, about Rs. 60 to 120 per day per person, average about Rs. 100 per day. max. Rs. 150 per day. For 25 days per month	Rs. 1,800 to Rs 4,500
8. Poverty line definition, as per Government of India, see above for explanation, at Rs. 26/32 per day, rural/urban per person, approx.	Rs. 780 to Rs. 960
Other related and relevant data	In millions/people
9. Number of people, in India, who are below poverty line	App. 300 million (30 Cr)
10. Number of people, in India, who work in the organized Public Sector, i.e. with the Central and State Governments	App. 19 million (1.9 Cr)
11. Number of people, in India, who work in the organized Private Sector	App. 11 million (1.1Cr)
12. Number of people, in India, who work in the unorganized Sector	App. 460 million (46 Cr)
13. Number of people, in India, who are unemployed or partly employed but of employable age	App. 300 million (30 Cr)
14. Number of jobs which need to be created every year, to fulfill the aspirations of the people of India	App. 10 million/yr (1 Cr)
15. Number of people born every year in India (China is only 13 million per year)	App. 28 million/yr (2.8 Cr)
16. Number of people, in India, who are below 35 years of age	App. 840 million (84 Cr)
17. Number of people, in India, who are less than 30 years of age	App. 660 million (66 Cr)

<1 billion = 1000 million> < 1 million = 10 lacs> <1 crore = 100 lacs = 10 million> <1 US\$ = Rs. 64 (approx)>

Importance of MSME's A Checklist for Growth

I write this article for five main reasons as to why MSME's are vital to our Nation.

Firstly, 93% of our workforce of 490 million is in the so called MSME's or the 'Unorganized Sector'

Secondly, MSME's are the dynamo for the growth of the Nation.

Thirdly, because of the owner driven managements, they are flexible, swift to change and take on the challenge of Export markets. They are run by risk taking and passionate entrepreneurs.

Fourthly, India has 200 million MSME's, out of which 80% in Agriculture and balance 20% in Manufacturing and Services.

Fifthly, a total of approximately 99.5% of all organizations in the world, including India, are MSME's.

Export or perish should be our 'battle cry'. India has only 1.7% of world trade (China + HK, 13.0%), 2.6% of world buying power (China 7.45%), 0.38% of tourist arrivals (China 11.5%), 3% of world FDI (China 10.25%), but 17% of world's human capital (China 21%). India has a large demand but very little buying power. There is untapped latent potential for India in Agriculture, Manufacturing and Services.

Exports will push organizations to improve equality, reduce cost and improve productivity. For example, the software business and diamond cutting industry has transformed India in many ways and will continue to do so in the future. This approach needs to be duplicated for all other spheres of the Indian Economy.

1. Learn the power and use of the Internet, as a source of information

The use of the Internet for any business, in today's global environment, is a must. We can get a lot of information, free of cost provided we are good at using the world wide web. The payback would be many times greater. India is going for broadband, with nearly Rs. 200,000 crores being invested. Internet telephony started from April 2002.

2. Each Industry association to have its own website

If we want the rest of the world to know us, the cheapest and best method is to host a website.

3. Each individual organization to have its own website

Every company is different in terms of product and service range, experience and other business aspects. Therefore the need of each member company to have its own site, which should be linked to the site of the association.

4. Exports are effective only if the website & marketing literature is in international languages

If Indian companies need to reach out to Japan, Korea, China and Europe, then the website and also the marketing brochures, must also be in the language of the importing country. This has many advantages and little cost. To boost international trade 'The People's Daily' in China prints in 6 international languages, besides Chinese, such as Japanese, Russian, Arabic, German, Spanish & English.

5. Domestic Business can be enhanced

By using local Indian languages. India is country with 22 cultures and as many languages. Only 7% of Indians understand English. We need to communicate in the language of our customers, Gujarati for Gujarat, Marathi for Maharashtra etc. The advantages of this are obvious, as business gurus will confirm.

6. Use of International Standards

The international standards are a wealth of information such as the German (DIN), British (BS), Japanese (JIS), American (ASTM) and European (EURO-NORM). Each industry association must get for its members a copy of the relevant standards. There is free know-how available in these standards, provided we know how to read these standards and plan to achieve their quality levels. This will push us to higher quality, lower costs, higher market share and more business and profits.

7. Bench Mark with the best companies of the world

The Japanese have been doing this since the last 100 years, other countries have followed. The final gainer is only the organization which practices this policy. Gujarat Ambuja Cement is an excellent case study, in the Indian context. There are many such Indian companies which have gained by learning from the best companies in the world. Learning organizations will always be winners!

8. Indian State Capitals need Convention Centers & Exhibition grounds of International quality

Germany is a classic example. After the 2nd World War, it was devastated. Every large city has these facilities, which then becomes a meeting ground for local companies to exhibit their wares and services, for domestic and world markets. Singapore and Hong Kong are following this example for many years. The spin-off is multi-fold- business, M&A's, tourism, joint ventures, etc. China is doing this in a big way. Excepting Hyderabad, no other state capital in India including Delhi, Mumbai, Chennai, Bangaluru Kolkata have an International Exhibition and Convention Centre. Already 67 years have passed!

9. Subscribe for literature and journals

A learning organization is the only one, which will be able to tackle competition and grow with time and also remain profitable. Visit to trade fairs, seminars and workshops, is a prerequisite for organizations. Learning organizations spend nearly 8.33% of their time, or nearly one month a year in training and re-training.

10. Learn a foreign language

Besides English, it is necessary for us to learn other foreign languages such as German, Spanish, Japanese, Arabic, etc; especially the ones where we want to do our exports and also imports. It always helps. Check Chinese export & tourism websites! You will find explanation and details in nearly 10 international languages German speaking countries account for nearly 9% of the world GDP. Japan accounts for another 12%. GDP of the English speaking world is hardly 30% of world GDP. Our fixation, that only English is enough is wrong and is hurting our foreign trade growth.

11. Conclusion – my thoughts

I wish to mention that in 2002 we were responsible with FICCI to convince the Government of India to

transform SSI into MSME. At that time I was in the National Committees of both CII and FICCI on SSI. However, the existing definition needs to be modified to bring in line with the EU definition which defines an MSME with assets of upto Rs. 344 Cr. and sales turnover of upto Rs. 400 Cr. See page 122 for details. The present definition has been kept low so that most MSME's can get excise exemptions, this is a political definition. We need to correct this by taking economically correct business decisions to make our MSME's world class and competitive with the best in the world. Secondly, the Ministry of MSME needs to set up a portal to assist new and existing MSME's to improve, see www.sba.gov and other MSME portals. Finally we need to have all government information, starting with the website of the Ministry of MSME in all the 22 Indian languages. English is only understood by 8% of the Indian population.

12. RBI definition can never globalize the Indian Economy! See below & page 122.

- Indian MSMEs are very small in size to USA, UK, EU, Japan, China, etc.
- Our MSMEs will find it very difficult to compete in the International markets.
- RBI does not include the agriculture sector as MSMEs? Only the manufacturing and the service sectors. Why?
- investment as per RBI in manufacturing is up to Rs. 25/500/1000 lacs & for services Rs. 10/200/500 lacs for MSME enterprises!

300 years ago India had
more than
30% of world trade.
Today it is less
than 2%.

Even Hero Cycles, Infosys,
RIL, NIIT, etc, started off
as MSME's!

MSME's Backbone of any economy

Importance of Micro Small Medium Enterprises

We are happy to enclose some findings of our research. Kindly go to www.google.com and search for **msme** sites of different countries. For example, see - www.smallbusinesseurope.org and www.esbaeurope.org, for Europe.

Micro, Small & Medium Enterprises

Micro, Small and medium sized enterprises are defined by the **European Commission** as independent enterprises that have fewer than 250 employees, and an annual turnover not exceeding E50/£33 million or a balance-sheet total not exceeding E43/£29 million

MSME's, in most parts of the world, means organizations with up to 250 employees.

In **USA**, this is only half the truth. You will notice from www.sba.gov, the website for **Small Business** in USA, that **Small Business** in USA could be defined either by maximum number of employees, which varies from 100 to 1500, or maximum turnover per year, this varies from \$0.75 to \$30 million, or the amount of financial assets, this goes up to \$ 150 million, depending upon the type of business!

There are nearly **1100 sub groups** of businesses in major groups of:- *Agriculture, Forestry, Fishing, Hunting, Mining, Construction, Manufacturing, Wholesale Trade, Retail Trade, Transportation, Information, Finance & Insurance, Real Estate, Rental, Leasing, Professional, Scientific & Technical Services, Management of Companies & Enterprises, Administrative Support, Waste Management & Remediation Services, Educational services, Health Care & Social services, Arts, Entertainment & Recreation, Accommodation, Food Services and Other Services.*

For **USA** see www.sba.gov/size, for details.

For **Japan** see www.sme.ne.jp.

For **Germany** see www.ifm-bonn.org.

MSME's normally means organizations with an annual turnover of up to Euro 50 million and/or with a maximum number of 250 employees. In Germany, nearly 80% of all trainees/apprentices (for Vocational Training), numbering more than 3 % of the German population, are with MSME's!

In all countries of the world, companies start as proprietorships, become small business units and then grow to medium size units or MSME's, all in the same category. **99.7% of all enterprises in the world are MSME's and balance 0.30%, are Large!**

They account for nearly 80% of the employment and nearly 80% of all value addition within the economy, directly and indirectly. One could expect a similar number as far as GDP and Exports are concerned.

Enterprises means all types of business and not only Industry!

The present definition of SSI's, and not MSME's, will only disadvantage India to be more isolated and removed from the ground realities of what goes on in this world!

Even **Pakistan** has adopted the International definition of MSME's and is implementing the same, in stages! For details see www.smeda.org.pk, Small Medium Enterprises Development Authority in Pakistan.

SMEs are 70%
to 80% of GDP

MSME's are Dynamos of Growth!

Our one page note on making India a Hub for International Markets, is a pointer to the present state of affairs of not recognizing the advantages of MSME's and how they could transform the Indian Economy.

Reservation for SSI - Doing more harm than good!.

The size of a manufacturing unit cannot be decided by some official in New Delhi. It is decided by International market forces and by the cutting edge technology and processes, which would be required to produce the product with the best quality and lowest cost, to be able to make it world class.

A case in point is the 'Mini-Steel Plants' where thousands of crores of Indian tax payer's money was invested in about 100 mini steel plants! Most of the organizations became sick and bankrupt. In today's context a steel plant should be of 5 to 10 million tons capacity per year. Such a unit will produce low cost steel to world class quality and cost, which could trigger off many down stream units, using this low cost & high quality steel as a raw material.

A large number of units would be keen to start world class manufacturing units, for the domestic markets, but are forced to follow these guidelines, which are very restrictive in nature.

Indian organizations must be allowed the freedom to have a 'level playing field' as their counterparts and competitors in other countries of the world. SSI is only a part of SME!

They were also MSMEs once

– GE, IBM, Microsoft,

Reliance Industries,

Hero Cycles, Infosys...

MSME's in USA, Japan, Taiwan, Europe, S.E. Asia, Brazil, China, etc., means enterprises with upto Rs. 400 Crores turnover and upto Rs. 344 Crores investment. **MSME's are the Dynamic Sector of any Nation.**

*How can our Indian tiny & small units - SSI compete with the so called Small Businesses or MSME's of the developed and developing countries? **Only de-control and freedom will help.***

We MUST recognize that 'Enterprises' means all types of business and not only Industry!

In USA, Europe, Japan and most countries of the world, MSME's account for nearly 80% of economic activity and employment. Kindly see Definition of MSME's and GDP analysis of the Indian Economy, In India, sadly, this fact is also here but it is NOT recognized.

For example banks will lend to an Industry but not so easily to a firm in trading, agriculture, construction, services or non-industrial activity. Why?

<1 billion = 1000 million> <1 million = 10 lacs> <1 crore = 100 lacs = 10 million> <1 US\$ = Rs. 64 (approx)>

INDIA must become an international hub for business to ensure 10 to 14% GDP growth rate

India must become an International Hub.

For manufacturing, trading and services

As a past member of the CII and FICCI National Council for **MSME's**, we are pleased to pen down some thoughts, which may assist the Govt. of India, for achieving the above. *These are our personal views & suggestions and not those of CII or FICCI.*

- India has all the ingredients to achieve a status of an International Hub, however many of the attributes are latent and need to be freed, deregulated and modified. Let us mention some of the most critical ones. **[Enterprises means all types of businesses and not only Industry!]**
- North America, Europe, Japan, S. Korea, Taiwan and China constitute about 80% of the World's GDP of about US\$70 trillion. In all these countries, the definition of **MSME's** means organizations with up to 250 to 1500 employees, depending upon the business. Their sales volumes are up to \$30 million in the USA, Euro 50 million in Europe, and so on.

Very different from the present MSME's Indian definition.

- The MSME's in the above countries contribute to nearly 60% to 80%, directly and indirectly, of their respective GDP's as well as Exports. MSME's are nimble, flexible, vibrant, lean and flat organizations. They are like the 'Cheetah' in the forest. They contribute to nearly 80% of employment and 80% of all trainees!
- **The present definition of the Indian so called MSME's, should be consigned to the archives of Indian Museums.** It is illogical for

India of the 21st century and does more harm than good to the Nation as well as to its owners and the lending Financial Institutions [in the medium and the long term]. **MSME's are born as babies and forced to remain so forever!**

Suggested ACTION PLAN

- Government of India should make a comparison chart showing the above, especially details of definition, percentage of GDP, percentage of exports, percentage of Employment, of MSME's, in the above countries.
- Change the definition, and all government regulations of MSME's in India to fall in line with International norms [if we do not act, external forces will force us to do so in due course]. **Replace SME with SSI. Redefine all enterprises as MSME's or large units.**
- Take a 'Big Broom' and sweep away any impediments, which may come in the way of the new and existing MSME's in India! Whether it is employee laws, flexibility of location, better infrastructure, lower cost of finance, vocational education and training, 100% primary literacy and enterpruenership skills development, government procedures and paper work.
- Educate & Train the key officials in the **Central Government** who are part of the economic ministries [including the MP's and Ministers] in New Delhi, about the advantages of this plan.
- Educate & Train the key officials in the **State Governments** who are part of the economic ministries [including the MLA's] in all the key State Capitals of India, about the advantages of this plan.

- Educate & Train the key officials in the **7000 top Municipalities of India** who are located in all the main SEZ's, Industrial Estates and Municipalities of the State [including the municipal councilors], about the advantages of this plan.
- Educate & Train the key officials in the **SSI/ MSME organizations** as well as the financial lending institutions in the states of India, about the advantages of this plan. **They will be the biggest gainers in this restructuring.**

It pains us to see where India is today and where it should be! Most of our problems are man-made and therefore there is hope of change!

China's manufacturing sector is 50% of GDP or \$ 2,400 billion per year, against India's 16% of GDP or \$ 256 billion per year.

China exports nearly 65% of its manufactured products.

With better governance and effective administration, India could make it's manufacturing sector also to 50% of GDP and make it world class in cost and quality.

The term 'labour', refers to the 19th century and should be changed to 'employee', to cover all employees.

The general impression is that organised sector employees are protected even at the cost of the entire nation.

Inspite of a large pool of of skilled human capital, India cannot become competitive, if it cannot use the best talent.

India's human capital **in the organised sector** is not always market driven, in terms of quality and cost.

This leads to high cost, wastage and uncompetitiveness of Indian goods and services in domestic as well as international markets.

This greatly influences and sets work culture and work ethics standards for the nation, which prevents the full potential of India's PPP, purchasing power parity, position to be fully realised.

Please see our **Relevant Manufacturing Policy** for India, for details.

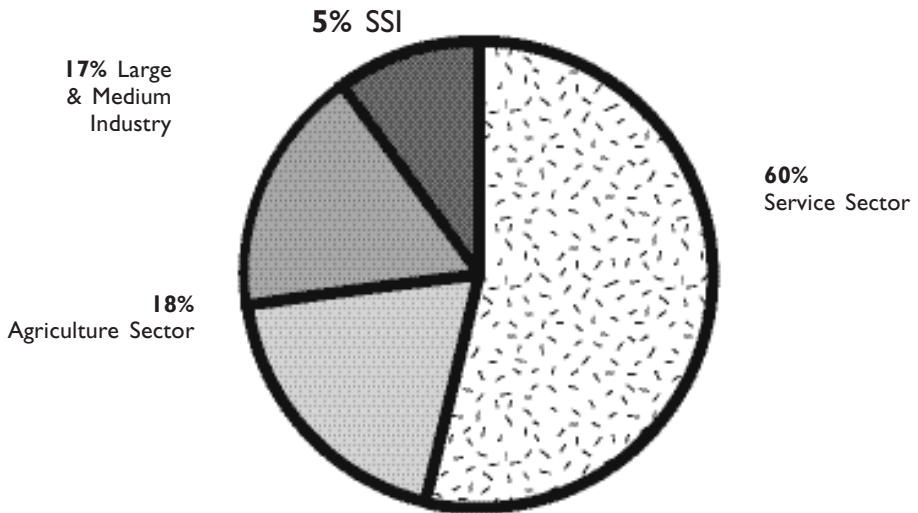
PPP or Purchasing Power Parity advantage of nearly 2 to 3 times for China & India w.r.t. to developed countries is a window of opportunity for India!

If we take PPP, China's GDP is \$11.29 trillion & India's GDP is \$4.63 trillion

GDP analysis of the Indian economy

1. GDP break-up of the Indian economy

Services, agriculture, large & medium industry & SSI (small scale industry)



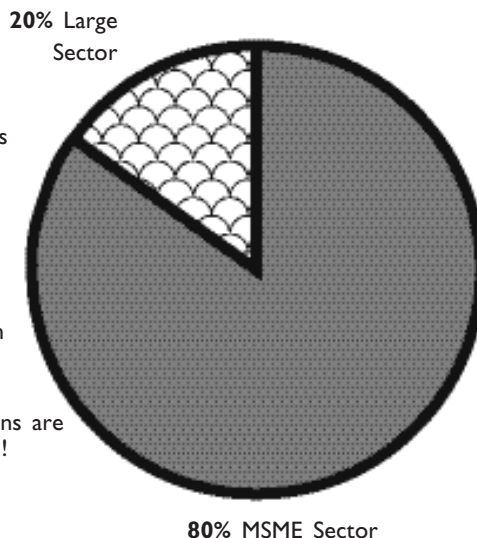
2. GDP break-up of the Indian economy

Large sector and MSMEs

Enterprises means all types of businesses, **not only** industry. It is here that entrepreneurs are born

MSME's account for nearly **99.7%** of all organizations in the World

Only **0.3%** of all organizations are **Large** in terms of numbers!



Note: If we take the normal definition of MSME's, as in Europe, Japan or in the USA, probably 70% to 80% of India's GDP will also fall in this sector. If indian organizations have to compete with the world we will need to redefine the operating parameters of Indian enterprises, for a level playing field of domestic organizations.

India must recognize the meaning of word '**M**' and '**E**' in **MSME's**!

<1 billion = 1000 million> < 1 million = 10 lacs> <1 crore = 100 lacs = 10 million> <1 US\$ = Rs. 64 (approx)>

Catch me if you can?

China - India, Economic & Socio-Economic Factors

Economic / Social factor	Unit of measure	China	India
1. Total Area (out of which water)	millions of sq km	9.60 (2.8%)	3.29 (9.5%)
2. Arable Land	of total area %	14.86	48.83
3. Irrigated Land	millions of sq km	0.64	0.62
4. Railways - length	in km '000	86	63.97
5. Roadways - paved/unpaved	in km '000	3056/804	1,604/1,800
6. Waterways - length	in km '000	110	14.5
7. Natural Gas - Proved Reserves	in billion cu m	800	1,074
8. Oil - Proved Reserves	billion bbl	14.80	5.68
9. Airports - Total/paved/unpaved	numbers	502/442/60	352/249/103
10. Coastline	in km	14,500	7,000
11. Steel Production	million tons/year	380	65
12. Food grain production	million tons/year	418	210
13. Cement Production	million tons/year	650	160
14. Crude Oil production	million tons/year	180	40
15. Coal Production	million tons/year	1,300	300
16. Electricity generated	Billions of Kilowatts	4,604	835
17. Transmission & distribution losses	as % of total power	6.8	23.4
18. Electricity tariff	US\$ / 100 KW	4 to 5	8 to 10
19. Cost of commercial borrowing	as % interest/year	6 - 7	10 - 16
20. Telephone lines connected	millions	294	35
21. TV sets in households	millions	600	100
22. Mobile/cellular phones	millions	859	850
23. Internet users	millions	389	61
24. Foreign trade (Excluding Hong kong & Macau)	US\$ billions/year	3641	820
25. External debt (Excluding Hong kong & Macau)	US\$ billions	697	267
26. Exports (Excluding Hong kong & Macau)	US\$ billions/year	1,898	320
27. Imports (Excluding Hong kong & Macau)	US\$ billions/year	1,743	500
28. Tourist Arrivals	millions/year	87	6
29. TV broadcast stations	numbers	3,240	562
30. Radio broadcast stations	AM/FM/short wave	369/259/49	153/91/68
31. FDI Stock (2008)	US\$ billions	1,979	143
32. Forex Reserves (Excluding Hong kong & Macau)	US\$ billions	3,236	360
33. GDP (Excluding Hong kong & Macau)	US\$ billions	6,989	1,843
34. GDP Growth (2011)	in % rate over last year	9.2	7.8
35. Labour Composition	Agriculture % / Industry % / Services %	36/29/35	52/14/34
36. Population	millions	1,343	1,205
37. Population increase per year	millions	16.53	24.82
38. Birth rate	Numbers per 1000	12.31	20.6
39. Per Capita income	US\$ per year/person	5,204	1,529
40. Life expectancy	Years	75	67
41. Investment	% of GDP	54	31
42. Poverty line - numbers	%/Numbers in millions	13/128	25/300
43. Inflation Rate	%	5.4	6.8
44. Median age	Number of years	35.5	26.2
45. Population Growth Rate	% of population	0.48	1.31
46. Infant mortality rate	Death Rate per 1,000	16	46
47. GDP (PPP)	US\$ billions	11,200	4,463
48. GDP (PPP) per person	US\$ per person/year	8,400	3,700
49. Fertility Rate	children born/woman	1.55	2.58
50. Literacy Rate - Defined as age 15 and over	can read & write - % of Pop	92	61
51. Death Rate	Rate per 1,000 pop	7.17	7.43
52. Public Debt	% of GDP	44	52
53. Unemployment rate	% of workforce	6.5	10.5
54. Labour force	in millions	816	488
55. People living with HIV/AIDS	'000 (2009)	740	2,400
56. Government budget	Revenues/Expenditure US\$ billions	1646/1729	219/311

<1 billion = 1000 million> <1 million = 10 lacs> <1 crore = 100 lacs = 10 million> <1 US\$ = Rs. 64 (approx)>

World - USA, BRIC, EU & Asia

Economic comparison of selected countries

COUNTRY	LAND AREA SQ KM '000	GDP US\$ BILLI- ON	POP MILLI- ON	GDP PER CAPITAL US\$/YR '000	IMPORT US\$ BILLION	EXPORT US\$ BILLION	LIFE EX- PECT- ANCY YEARS	LITER- ACY % OF POP	TEL LINES LAND + MOBILE MILLI- ONS	ROADS KM '000 PAVED	LAB- OUR FORCE MILLI- ONS
USA (1st)	9,826	15,040	314	47.90	2,314	1,511	78	99	430	6,506	153
Japan (3rd)	378	5,855	127.3	45.99	795	800	84	99	161	1,210	65
Germany(4th)	357	3,629	81.3	44.64	1,198	1,408	80	99	151	644	43.6
France	547	2,808	65.6	42.80	684	578	81	99	100	951	29.6
Switzerland	41	666	7.65	87.06	300	308	81	99	14	71	4.26
Belgium	31	529	10.4	50.86	332	332	79	99	17	153	5.1
Holland	42	858	16.7	51.37	514	577	81	99	26	136	7.8
Russia*	17,075	1,791	138	12.98	310	499	66	100	282	982	75
Brazil*	8,512	2,518	206	12.22	220	251	73	89	245	1,751	104
UK	245	2,481	63	39.38	655	495	80	99	114	394	31.7
Canada	9,985	1,759	34.3	51.28	460	450	81	99	41	1,042	18.7
Pakistan	804	204	190	1.07	35	25	66	50	114	260	58.4
Hong Kong	1.1	242	7.15	33.85	482	428	82	94	17.7	2.0	3.70
U. A. E	82	358	5.30	67.54	186	265	77	78	12.4	4.1	4.11
Malaysia	330	248	29.18	8.50	168	213	74	89	39	98	11.9
Thailand	514	345	67	5.15	215	244	74	93	76	180	39
Singapore	0.7	266	5.35	49.72	310	409	84	93	9.3	3.4	3.2
China* (2nd)	9,600	6,989	1,343	5.21	1,743	1,898	75	92	1150	3,860	816
India*	3,288	1,843	1,210	1.53	451	300	67	61	850	3,320	490
World	148,940	70,160	7,021	9.99	17,580	18,000	66	84	6,600	102,260	3,270

1. * The **BRIC** countries as per the Study of **Goldman Sachs** are - **Brazil, Russia, India & China**
2. The above table compares nearly 19 countries against some basic parameters as mentioned at the top of the table.
3. The purpose being to compare India not only with the **BRIC** countries but also with the 'Big Three', USA, Japan and Germany and with some other developed and developing countries in Europe and Asia.
4. The tables on pages 60 and 61 are ready recknors for people in India to know where we are in 2014 and where we need to go. As per PPP **Indian GDP is \$4.63 trillion** and **China is \$11.29 trillion**.
5. The table clearly shows that **INDIA needs to give top priority towards human development** such as in education and health. In Education, priority required in **A. Primary Education B. Vocational Education & Training** and **C. Removal of 'Licence Raj'** in Higher, Medical and Technical education

<1 billion = 1000 million> <1 million = 10 lacs> <1 crore = 100 lacs = 10 million> <1 US\$ = Rs. 64 (approx)>

Employment generation through MSMEs

In India we tend to confuse the word '**Industry**' for all types of economic activity other than agriculture.

This needs some correction since all economic activity, including agriculture, can also be classified under 'enterprise' or 'businesses' or 'trade'. 99.7% of all organizations in the world are MSMEs, micro small medium enterprises.

This is valid for all economies of the world including India. Only 0.3% of organizations are large

We believe that this is where about 97% of all new employment generation is taking place in the country. Most of these organizations are in the 'unorganized sector'.

How can our **Indian tiny and small units - SSI** compete with the so called **Small Businesses** or **MSME's** of the developed and developing countries? Only a closer realignment with them will help.

For **MSME's** in **USA** see www.sba.gov.

For **Europe** see www.smallbusiness europe.org or www.esba-europe.org.

For **Germany** see www.ifm-bonn.org.

For **Japan** see www.sme.ne.jp.

SSI's are **ONLY 5% of GDP**, while **MSME's** are nearly **80% of the GDP** of India!

Reservation for SSI - Doing more harm than good! The size of a manufacturing unit or an enterprise cannot be decided at random.

It is decided by *International market forces* and by the *cutting edge technology and processes*, which would be required to produce the product with the best *quality and lowest cost*, to be able to make it *world class*.

As India is globalizing, this will become more and more important. We also have a FTA with many economic areas of the world; hence truly global organizations will eventually exist.

If you see the *Small Business Size Standards* of USA, one will notice that there are nearly 1100 sub groups of businesses in major groups of:- *Agriculture, Forestry, Fishing, Hunting, Mining, Construction, Manufacturing, Wholesale Trade, Retail Trade, Transportation, Information, Finance & Insurance, Real Estate, Rental, Leasing, Professional, Scientific & Technical Services, Management of Companies & Enterprises, Administrative Support, Waste Management & Remediation Services, Educational services, Health Care & Social services, Arts, Entertainment & Recreation, Accommodation, Food Services and Other Services*. See www.sba.gov/size for details.

The **SBA - USA** classification is based on one of the three criteria. On the basis of annual **turnover** (up to US\$ 30 million) or **number of employees** (up to 1500) or **capital employed** (assets up to US\$ 150 million).

MSMEs In USA, Japan, Taiwan, Europe, S.E. Asia, Brazil, China, etc., mean **enterprises with** upto Rs. 400 crore turnover and upto Rs. 344 crores in investment.

MSMEs are the *Dynamic Sector* of any Nation. **SSIs** are only a small part of **MSME!**

If India has to generate employment, we need to understand the sectors of the economy which come under the classification of MSMEs.

The chart below has been taken from the **Small Business Classification** or **SBA, USA**.

It is only indicative. The full list is available at the website www.sba.gov. Charts of other countries may also be used for comparison.

Only the main sectors and sub sectors are shown below. The figures in brackets, { }, indicates the total number of sectors under that heading.

The expanded list covers 75 pages.

<1 billion = 1000 million> <1 million = 10 lacs> <1 crore = 100 lacs = 10 million> <1 US\$ = Rs. 64 (approx)>

Categories of MSMEs

United States of America - SBA classification

These are the sectors of the economy where **Enterprise Skills Education and Vocational Education and Training** are required.

1. Sector 11 – Agriculture, Forestry, Fishing and Hunting {5}

Subsector 111 – Crop Production {30}
Subsector 112 – Animal Production {18}
Subsector 113 – Forestry and Logging {3}
Subsector 114 – Fishing, Hunting and Trapping {4}
Subsector 115 – Support Activities for Agriculture and Forestry {10}

2. Sector 21 – Mining {3}

Subsector 211 – Oil and Gas Extraction {2}
Subsector 212 – Mining (except Oil and Gas) {22}
Subsector 213 – Support Activities for Mining {5}

3. Sector 22 – Utilities {1}

Subsector 221 – Utilities {10}

4. Sector 23 – Construction {3}

Subsector 236 – Construction of Buildings {6}
Subsector 237 – Heavy and Civil Engineering Construction {7}
Subsector 238 – Specialty Trade Contractors {19}

5. Sectors 31-33 – Manufacturing {21}

Subsector 311 – Food Manufacturing {47}
Subsector 312 – Beverage and Tobacco Product Manufacturing {9}
Subsector 313 – Textile Mills {11}
Subsector 314 – Textile Product Mills {8}
Subsector 315 – Apparel Manufacturing {24}
Subsector 316 – Leather and Allied Product Manufacturing {10}
Subsector 321 – Wood Product Manufacturing {14}
Subsector 322 – Paper Manufacturing {20}
Subsector 323 – Printing and Related Support Activities {12}
Subsector 324 – Petroleum and Coal Products Manufacturing {5}
Subsector 325 – Chemical Manufacturing {34}
Subsector 326 – Plastics and Rubber Products

Manufacturing {17}
Subsector 327 – Nonmetallic Mineral Product Manufacturing {24}
Subsector 331 – Primary Metal Manufacturing {26}
Subsector 332 – Fabricated Metal Product Manufacturing {43}
Subsector 333 – Machinery Manufacturing {49}
Subsector 334 – Computer and Electronic Product Manufacturing {30}
Subsector 335 – Electrical Equipment, Appliance and Component Manufacturing {22}
Subsector 336 – Transportation Equipment Manufacturing {30}
Subsector 337 – Furniture and Related Product Manufacturing {13}
Subsector 339 – Miscellaneous Manufacturing {24}

6. Sector 42 – Wholesale Trade {3}

Subsector 423 – Durable Goods {37}
Subsector 424 – Merchant Wholesalers, Nondurable Goods {32}
Subsector 425 – Wholesale Electronic Markets and Agents and Brokers {2}

7. Sectors 44-45 – Retail Trade {12}

Subsector 441 – Motor Vehicle and Parts Dealers {9}
Subsector 442 – Furniture and Home Furnishings Stores {4}
Subsector 443 – Electronics and Appliance Stores {4}
Subsector 444 – Building Materials and Garden Equipment & Supplies Dealers {6}
Subsector 445 – Food and Beverage Stores {11}
Subsector 446 – Health and Personal Care Stores {5}
Subsector 447 – Gasoline Stations {2}
Subsector 448 – Clothing and Clothing Accessories Stores {14}
Subsector 451 – Sporting Good, Hobby, Book and Music Stores {7}
Subsector 452 – General Merchandise Stores {4}
Subsector 453 – Miscellaneous Store Retailers {9}
Subsector 454 – Nonstore Retailers {8}

8. Sectors 48-49 – Transportation {11}

- Subsector 481 – Air Transportation {7}
- Subsector 482 – Rail Transportation {2}
- Subsector 483 – Water Transportation {6}
- Subsector 484 – Truck Transportation {6}
- Subsector 485 – Transit and Ground Passenger Transportation {11}
- Subsector 486 – Pipeline Transportation {4}
- Subsector 487 – Scenic and Sightseeing Transportation {3}
- Subsector 488 – Support Activities for Transportation {14}
- Subsector 491 – Postal Service {1}
- Subsector 492 – Couriers and Messengers {2}
- Subsector 493 – Warehousing and Storage {4}

9. Sector 51 – Information {6}

- Subsector 511 – Publishing Industries (except Internet) {7}
- Subsector 512 – Motion Picture and Sound Recording Industries {11}
- Subsector 515 – Broadcasting (except Internet) {4}
- Subsector 516 – Internet Publishing and Broadcasting {1}
- Subsector 517 – Telecommunications {7}
- Subsector 518 – Internet Service Providers, Web Search Portals, and Data Processing Services {3}
- Subsector 519 – Other Information Services {3}

10. Sector 52 – Finance and Insurance {4}

- Subsector 522 – Credit Intermediation and Related Activities {14}
- Subsector 523 – Financial Investments and Related Activities {10}
- Subsector 524 – Insurance Carriers and Related Activities {10}
- Subsector 525 – Funds, Trusts and Other Financial Vehicles {7}

11. Sector 53 – Real Estate and Rental and Leasing {3}

- Subsector 531 – Real Estate {9}
- Subsector 532 – Rental and Leasing Services {14}
- Subsector 533 – Lessors of Nonfinancial Intangible Assets (except Copyrighted Works) {1}

12. Sector 54 – Professional, Scientific and Technical Services {1}

- Subsector 541 – Professional, Scientific and Technical Services {54}

13. Sector 55 – Management of Companies and Enterprises {1}

- Subsector 551 – Management of Companies and Enterprises {2}

14. Sector 56 – Administrative and Support {2}

- Subsector 561 – Administrative and Support Services {32}
- Subsector 562 – Waste Management and Remediation Services {12}

15. Sector 61 – Educational Services {1}

- Subsector 611 – Educational Services {18}

16. Sector 62 – Health Care and Social Assistance {4}

- Subsector 621 – Ambulatory Health Care Services {21}
- Subsector 622 – Hospitals {3}
- Subsector 623 – Nursing and Residential Care Facilities {6}
- Subsector 624 – Social Assistance {9}

17. Sector 71 – Arts, Entertainment and Recreation {3}

- Subsector 711 – Performing Arts, Spectator Sports and Related Industries {11}
- Subsector 712 – Museums, Historical Sites and Similar Institutions {4}
- Subsector 713 – Amusement, Gambling and Recreation Industries {10}

18. Sector 72 – Accommodation and Food Services {2}

- Subsector 721 – Accommodation {7}
- Subsector 722 – Food Services and Drinking Places {8}

19. Sector 81 – Other Services {3}

- Subsector 811 – Repair and Maintenance {19}
- Subsector 812 – Personal and Laundry Services {16}
- Subsector 813 – Religious, Grant making, Civic, Professional and Similar Organizations {13}

Section-5

Skills, Vocational Training & Employment

*Where tireless striving stretches its arms towards perfection;
Where the clear stream of reason has not lost its way into the
dreary desert sand of dead habit;*

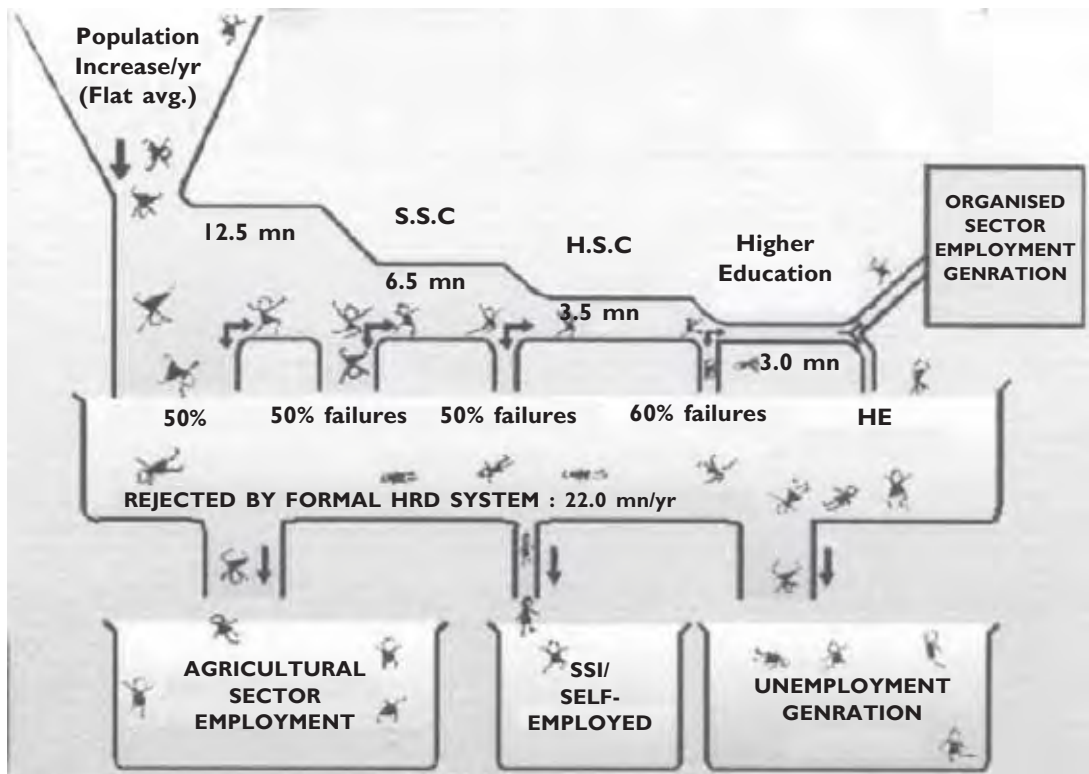
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15. Skilling 20 million people per year	87

Overview

It is for very good reason that a special section has been devoted to vocational education and training and all forms of skills enhancement. We as a nation have failed on all fronts of education, whether it is pre-primary, primary, secondary or even higher and technical education. Our standards are slipping in PISA and other world rankings. But the most neglected sector is skill building of our work force. There is too much emphasis on college education where we have nearly 40,000 colleges, but only 12,000 skill centers. China has nearly 500,000 VET centers. Even small Germany with a population of only 81 million has nearly 100,000 VET centers! For highest productivity, world class competitiveness and high quality with low cost in manufacturing, agriculture and services is only possible with a skilled workforce. The IT & Software sector is a good example to follow. These thirteen articles clearly prove that if the Nation has to develop into a super power our entire work force of 490 million will have to be world class. Examples of Germany, Japan and South Korea go to re-enforce our point of view. VET means Vocational Education & Training.

Human Resource Development

and how it effects Employment & Unemployment



Action Plan for the upliftment of Rural & Urban INDIA

In order to achieve *Employment Generation*, +10% GDP Growth per year, *Reduction of Poverty* and making Indian Enterprises World Class in terms of Quality & Cost **By the use of Education & Training - Focus on Literacy, ESD & VET**

- 100% Primary Functional - Literacy.** Learn to read & write in 40 to 60 hours or in 2 to 3 months, for ages 8 to 70 years! Nearly 380 to 600 million people are illiterate!
- Enterprise Skills Development - ESD.** ESD for Class 5th to Class 12th students & higher. Only 1 to 2 hours required per week. Teaches the youth about enterprises and how the real world functions! In India the dropout rate between

- The above is a simple diagrammatic representation for understanding employment and unemployment figures.
- The above is based on the assumption that all the youth should enter the educational system at different levels, each year.
- Cumulative unemployment 300 million (estimate)

- Vocational Education & Training - VET.** VET for youth of ages 14 to 35 years and higher. Choice of nearly 3000 courses in 15,000 modules, in 25 different business fields. In developed and developing countries nearly (60% to 80%) of the youth opt for VET. If India trains 10% to 12% of the work force in VET, like in other developed and developing countries, it would mean nearly 50 to 60 million trained and skilled people per year. Engineers, Doctors and MBAs require world class supporting staff and manpower.

We are not discussing 'Higher Education' since all the present focus in India is only on 'Higher Education'.

- The present emphasis is on higher education, which hardly benefits 7% of the employment sector. We need to strengthen the **P&SE, ESD** and **VET** sectors to benefit the 94% of employment.

Estimates based on studies conducted by DEIS, Pune & i Watch, Mumbai

Importance of Education & Skills through Vocational Education & Training (VET) for Employment Generation and for a Sustainable Economy

We are happy to enclose two notes on vocational education and training or **VET** and **skills building**.

One is for **educational institution** and the other for **government and business**.

1. Paradox India - 300 million unemployed or underemployed..... is for education institutions and academic leaders.

Please see details in this book -**Transforming INDIA** on pages 45 and 46 or on our website at www.wakeupcall.org

2. Relevant Education & Training of our Human Capital..... is for government, trade unions, chambers of commerce and business leaders. Please see our book - **Transforming INDIA** on pages 82 and 83 or on our website at www.wakeupcall.org

The main purpose of these two short notes is to change the **Mindset of Civil Society** about education and human resource development as far as it directly affects major national issues like:-

1. Bridging the gap for employment generation.
2. Reducing poverty.
3. Increasing the availability of trained and skilled manpower.
4. Competitiveness of Indian businesses.
5. Taking advantage of India's Demographic Dividend'.
6. Preparing the youth of India as a manpower resource for world markets.
7. Why entrepreneurship is important for all human resource, whether employed or self-employed.

8. Human resource development for employment generation starts from the school system and then flows into vocational education and other skills building streams including higher & technical education and finally adult and life-long learning.

Today the youth after finishing school feel that they have only **four option**, become an **engineer**, get into **IT and software**, become a **doctor** or finish an **MBA**?

They could not be more wrong or misled!

There are **1,100 sectors of the Indian economy** where skilled manpower resource is required. See pages 71 to 73.

Details at our website at www.wakeupcall.org or in our 136 page book, '**Transforming INDIA** through empowerment of human capital through education & skills building'. The one you are reading now.

See www.wakeupcall.org for more details.

The second reason is to highlight to **government** and **business**, especially the **chambers of commerce** and their members that they have to take active interest and a fulltime role as far as education, HRD and skill building is concerned.

Businesses are driven not only **financial** and **material resources** but mainly **by high quality human resources and human capital**.

Finally, to highlight what was happening in countries like China, USA, Japan, South Korea, Germany and Austria; so as to benchmark India vis-a-vis some other economic areas.

'Employment Matrix' of INDIA

Any **Employment Policy** for India has to be beneficial to all and be able to direct Indian Business and Enterprises to be able to compete with Asian and other competitive economies of the world. **Only such a policy will encourage GDP growth.**

The future of India lies in becoming a resource base for world markets. The present **Employment Matrix** :

1. India has 1,225 million people, 17% of the World Population.
2. India has a very large demand of goods, services and products, but a very low buying power, as the GDP is only **2.62%** of world GDP. Rest of the world (the markets outside India) has **40 times** more buying power.
3. Central and State Governments cannot '**pump prime**' the economy any more, since they are both having deficits of nearly Rs. 125,000 cr. each, totaling nearly 10% to 11% of the Indian GDP. Wrong and irresponsible past policies have had their effect. The present and future generations have to correct the past policies and mistakes.
4. 70% of the population is less than 35 years of age. 55% are less than 30 years of age!
5. 28 million people are added every year into the job market. If we have to provide Government jobs to all the new entrants, we will need a "NEW" India every year, which is NOT possible. We add five Singapores per year.
6. 19 million work with Public Sector Undertakings, Central & State Governments.
7. This **1.7 %** of the Indian population tends to "**Drive**" & "**Dictate**" Employee and Labour Policy within the Indian Union. This sector is using VRS to reduce cost.

8. The present **Work Culture & Work Ethics** needs improvement to bring us in line with '*Asian Tigers*'.
9. Another 11 million work within the Organized Private Sector. This sector is also using VRS to reduce cost.

Work ethics and work culture need improvement, in line with the '*Asian Tigers*'

10. There is very little scope for high employment generation in the above sectors, in view of the existing Employee Laws, high cost (to the Indian context), bloated work force and sometimes not efficient enough, as per the other economies.
11. At any given time nearly **44 million** people are registered with the employment exchanges.
12. Including the ones registered, nearly **300 million** are unemployed or partly employed (our estimates) and waiting for employment. **They do not have adequate skill sets.**
13. The existing Employee Laws do not allow Indian business to employ the **lowest cost** and **most efficient** human capital which is available to it. This makes Indian Industry, Trading & Services **uncompetitive**, as compared to other Asian Countries, and leads to high cost and low productivity of Indian business, as compared to other destinations of the world; in spite of a large unemployed work-force available within the country.

14. **460 million** work in agriculture, construction, cottage and village enterprises, self employed, tiny sector, and **MSMEs**, small and medium enterprises. It is in this sector that the largest number of jobs are created. More employment is possible provided Indian Employee Laws are redefined and in-line with the ones in other Asian countries. *All over the world this is the **dynamic sector** where the maximum number of jobs, nearly 85% to 90%, are created.*
15. For details and advantages about **MSMEs**, please see articles under economy and enterprise.
16. The existing Employee Laws seem to protect only the 30 million people working in the **Organized Public & Private Sectors**, even at a cost to the rest of the nation!
17. Poverty line, as per the government, is approximately Rs. 780 to 960 per month (enough money to buy 2200 Kcal of food value per day from the public distribution system)
18. Minimum wages, as defined by the Labour Ministry, is Rs. 60 to 120 per day or Rs. 1,800 to 3,750 per month (25 days). Different for different zones within each state.
19. The Poverty line as defined by World Bank is US **\$1 to \$2 per day** or Rs. 1,800 to Rs. 3,600 per month
20. An average Indian earns about US\$ 1,530 per year or Rs. 7,500 per month
21. The existing Employee Laws protect employees who normally earn Rs. 5,000 to Rs. 1,00,000 per month. Rights are ensured, but with out accountability and performance. **Can a poor country afford this?**
22. Because of the above reasons, Indian Businesses and Enterprises **are avoiding** getting into manufacturing and services where a large number of employees are required and also avoiding using **Labour Intensive Technologies**. **This hinders employment generation.**
23. **Article 311** of the Indian Constitution, needs suitable revision and amendment as in the present form, it is detrimental to India and Indians in 2015.
24. Our '**Labour Policy**' should benefit the maximum number of Indians and not the minimum, e.g., the 300 million unemployed, the 28 million youth entering the job market every year and convert India into a **World Class Nation**.
25. **Simplify** Employee (Labour) Laws for **MSMEs**, Small Medium Enterprises, as this sector is most important.
26. **Classify** Indian Enterprises into **Large** units and **MSMEs**, for a level playing field for Indian Organizations.
27. **Rename** 'Labour Law' to '**Employee Law**', think differently in 2015. Think of India in the 21st Century!
28. **Benchmark** Indian Employee (Labour) Laws, with other Asian Developing Countries, including China and the '**Asian Tigers**', for a level playing field for the Indian organizations to operate within India and still compete.
29. Allow **Exit Policy** in MSMEs of up to 500 employees (India must use labour Intensive Processes)
30. Employee Policy must cover **C2C** or '**Chairman**' to '**Coolie**'.

Organized sector
should be world class
and set standards for
work culture and
work ethics

Employment generation through VET

Notes and Observations

1. An attempt has been made to broadly explain the main areas of the world economy where trained manpower resources are required.
 2. The world economy is generally divided into approximately **23 to 25 Major Enterprise Groups**.
 3. These 23 to 25 Major Groups are further subdivided into **208 Minor Enterprise Groups**.
 4. These 208 Minor Groups are further expanded to cover about **3000 to 4000 distinct areas of the world economy**, where trained manpower is required with appropriate VET qualifications.
 5. The below stated list is based in the manner various enterprises and VET courses are segmented in the U.K. Different countries will have different lists, but in essence the total number of major courses will nearly be the same.
 6. **Different countries and regions** would have different enterprises and accordingly different VET courses to service these enterprises.
 7. The figures shown in brackets, at the right hand side of each category, indicate the total number of courses in that category.
 8. The 12,000 Industrial Training Institutes, **ITIs** and **ITCs**, under the Ministry of Labour & Employment have identified about 400 different VET courses.
 9. The actual number of VET courses being imparted within the country is probably much higher, since VET courses are being also imparted by the Ministry of HRD, Agriculture, Commerce, Industry and others. Information on these is not freely available and has not been documented for public use.
 10. **Private initiatives** are also imparting many VET courses, under the major sectors. Information on these is not properly catalogued.
 11. Large organizations within the organized sector
- both Public and Private also impart dedicated VET courses within their own organizations for their own use. Information on these is not properly catalogued.
12. VET courses are also being imparted in the informal, rural, village and semi urban sector. Information on these is not properly catalogued.
 13. We will have to formalize and collate data **block-wise, district-wise** and **state-wise**, depending upon the resources and enterprises in that local area.
 14. Any compilation of such courses will be under constant revision both in the content as well as in the total number of courses, based upon the actual status of economy and needs of the local area at any given point of time.
 15. Based on the above observations the below mentioned list should only be considered as an indicative one. **To be used as a basis for further planning and as a starting point for future action.**
 16. In most developing and developed countries, nearly 7% to 9% of the working population would be undergoing some sort of VET courses at any given time. This translates to about 35 to 45 million people per year within India undergoing VET at any given time!
 17. Human resources need constant up gradation and retraining.
 18. It is quite possible for people to undergo many VET courses during a lifetime or work. VET courses must provide for both lateral as well as vertical mobility.

VET means Vocational
Education and Training.
It also means Skills and
hands on training

<1 billion = 1000 million> <1 million = 10 lacs> <1 crore = 100 lacs = 10 million> <1 US\$ = Rs. 64 (approx)>

Classification of Vocational Education & Training (VET) courses

A. Business/Management/Office Studies {12}

1. Business/Finance (General) {9}
2. Management (General) {19}
3. Public Administration {3}
4. International Business Studies/Briefings {22}
5. Enterprises {22}
6. Management Skills {39}
7. Management Planning & Control Systems {23}
8. Human Resource Management {29}
9. Financial Management/Accounting {52}
10. Financial Services {19}
11. Office Skills {21}
12. Typing/Shorthand/Secretarial Skills {25}

B. Sales Marketing & Distribution Marketing {6}

13. Export/Import {13}
14. Marketing/PR {27}
15. Retailing/Wholesaling/Distribution Trades {17}
16. Retailing/Distribution: Specific Trades {14}
17. Sales Work {10}
18. Physical Distribution {15}

C. Information Technology & Information {9}

19. Computer Technology {57}
20. IT: Computer Science/Programming/ Systems {82}
21. IT: Computer use {13}
22. Using Software & Operating Systems {625}
23. Text/Graphics/Multimedia Presentation Software {192}
24. Software for Specific Applications/ Industries {46}
25. Information Work/Information Use {7}
26. Information Systems/Management {22}
27. Libraries/Librarianship {28}

D. Humanities (History)/Archaeology/ Religious Studies/Philosophy {4}

28. Humanities/General Studies/Combined Studies {12}

29. History {62}
30. Archaeology {46}
31. Religious Studies {61}

E. Politics/Economics/Law/ Social Sciences {5}

32. Government/Politics {39}
33. Economics {41}
34. Law {74}
35. Social Sciences General/Combined {7}
36. Social Studies {43}

F. Area Studies/Cultural Studies/ Languages/Literature {5}

37. Culture/Gender/Folklore {19}
38. Literature {49}
39. Linguistic Studies {23}
40. Languages {303}
41. Cultural/Area/Social/Diaspora Studies {290}

G. Education Training/Teaching {6}

42. Education Theory/Learning Issues {39}
43. Teaching/Training {73}
44. Teaching/Training: Specific Issues {167}
45. Education School Organization {22}
46. Training/Vocational Qualifications {18}
47. Careers/Education Guidance Work {8}

H. Family Care/Personal/ Development/ Personal Care & Appearance {10}

48. Self Development {24}
49. Career Change/Access {24}
50. Continuing Education (Basic Skills) {14}
51. Personal Finance/Consumerism/Rights {21}
52. Parenting/Careers {33}
53. Disabled People: Skills/Facilities {23}
54. Crisis/Illness/Self Help {27}
55. Personal Health/Fitness/Appearance {24}
56. Therapeutic Personal Care {5}
57. Hair/Personal Care Services {19}

J. Arts & Crafts {12}

58. Art Studies/Fine Arts {31}
59. Art Techniques/Practice {32}

60. Design (Non-Industrial) {10}
61. Museum Gallery/Conservation Skills {10}
62. Collecting/Antics {36}
63. Crafts: Leisure/General {14}
64. Decorative Leisure Crafts {19}
65. Decorative Metal Crafts/Jewelry {13}
66. Fashion/Textiles/Clothing Craft {21}
67. Fabric Crafts/Soft Furnishings {24}
68. Wood Cane & Furniture Crafts {19}
69. Glass/Ceramics/Stone Crafts {13}

K. Authorship/Photography/ Publishing Media {8}

70. Communication/Media (General) {16}
71. Communication Skills {10}
72. Writing (Authorship) {21}
73. Journalism {17}
74. Photography {11}
75. Film/Video Production {8}
76. Audio & Visual Media {4}
77. Print & Publishing {49}

L. Performing Arts {9}

78. Performing Arts (General) {1}
79. Dance {43}
80. Theatre & Dramatic Arts {13}
81. Variety Circus & Modeling {12}
82. Theatre Production {11}
83. Music History/Theory {18}
84. Music of Specific Kinds/Cultures {49}
85. Music Performance {43}
86. Music Instrument Technology {7}

M. Sports Games & Recreation {9}

87. Sports Studies/Combined Sports {23}
88. Air Sports {10}
89. Water Sports {34}
90. Athletics Gymnastics/Combat Sports {27}
91. Wheeled Sports {17}
92. Winter Sports {29}
93. Ball & Related Games {36}
94. Country/Animal Sports {51}
95. Indoor Games {16}

N. Catering/Food/Leisure Services/ Tourism {11}

96. Hotel Catering (General) {26}
97. Food Drink Services {16}
98. Catering Services {26}

99. Hospitality Services {12}
100. Baking/Dairy/Food & Drink Processing {34}
101. Cookery & Home Economics {29} & {4}
102. Food Science/Technology {19}
103. Tourism/Travel {16}
104. Leisure/Sports Facilities Work {17}
105. Country Leisure Facilities Work {10}
106. Arts/Culture/Heritage Administration {9}

P. Health Care/Medicine/ Health & Safety {15}

107. Health Care Management/Health Studies {35}
108. Medical Sciences {49}
109. Complementary Medicine {10}
110. Paramedical Services/Supplementary Medicine {12}
111. Medical Technology/Pharmacology {24}
112. Dental Services {23}
113. Ophthalmic Services {5}
114. Nursing {37}
115. Semi-Medical/Physical/Psycho/Therapy {16}
116. Psychology {27}
117. Occupational Health & Safety {36}
118. Social Care/Social Work Skills {18}
119. Family/Community Work {53}
120. Crisis Support/Counseling {17}
121. Child Care Services {8}

Q. Environment Protection/Energy/ Cleansing/Security {8}

122. Environment Protection/Conservation {37}
123. Energy Economics/Management/Conservation {22}
124. Pollution/Pollution Control {17}
125. Environmental Health/Safety {10}
126. Cleansing {13}
127. Funerary Services {4}
128. Security {25}
129. Fire Prevention/Fire Prevention {4}

R. Sciences & Mathematics {8}

130. Science & Technology (General) {20}
131. Mathematics {92}
132. Physics {57}
133. Chemistry {39}
134. Astronomy {11}
135. Earth Sciences {47}

136. Land & Sea Surveying/Cartography {24}

137. Life Sciences {92}

S. Agriculture Horticulture & Animal Care {14}

138. Agriculture/Horticulture (General) {7}

139. Agricultural Sciences {16}

140. Crop Protection/Fertilizers/Byproducts {30}

141. Crop Production {76}

142. Gardening/Floristry/Plant Sales {27}

143. Amenity Horticulture/Sports Ground {18}

144. Forestry/Timber Production {25}

145. Animal Husbandry {72}

146. Fish Production/Fisheries {18}

147. Agricultural Engineering/Farm Machinery {27}

148. Agricultural/Horticultural Maintenance {32}

149. Rural/Agricultural Business Organizations {20}

150. Veterinary Services {13}

151. Pets/Domestic Animal Care {18}

T. Construction & Property (Built Environment) {11}

152. Built Environment(General) {11}

153. Property: Surveying/Planning/
Development {42}

154. Building Design/Architecture {18}

155. Construction (General) {11}

156. Construction Management {12}

157. Building/Construction Operations {61}

158. Building Services {44}

159. Interior Design/Fitting/Decoration {9}

160. Construction Site Work {24}

161. Civil Engineering {54}

162. Structural Engineering {6}

V. Services to Industry {6}

163. Production/Operations Management {13}

164. Purchasing/Procurement & Sourcing {11}

165. Quality & Reliability Management {18}

166. Industrial Control/Monitoring {24}

167. Industrial Design/Research &
Development {27}

168. Engineering Services {13}

W. Manufacturing Production Work {12}

169. Manufacturing (General) {8}

170. Manufacturing/Assembly {13}

171. Instrument Making/Repair {6}

172. Testing Measurement & Inspection {20}

173. Chemical Products {14}

174. Glass/Ceramics/Concrete Manufacture {22}

175. Polymer Processing {16}

176. Textiles/Fabrics (Industrial) {27}

177. Leather Footwear & Fur {9}

178. Woodworking/Furniture Manufacture {16}

179. Paper Manufacture {12}

180. Food/Drink/Tobacco (Industrial) {39}

X. Engineering {15}

181. Engineering/Technology (General) {14}

182. Metals Working/Finishing {23}

183. Welding/Joining {35}

184. Tools/Machining {21}

185. Mechanical Engineering {48}

186. Electrical Engineering {23}

187. Power/Energy Engineering {42}

188. Electronic Engineering {49}

189. Telecommunications {33}

190. Electrical/Electrical Servicing {16}

191. Aerospace/Defense Engineering {28}

192. Ship & Boat Building/Marine/
Offshore Engineering {23}

193. Road Vehicle Engineering {28}

194. Vehicle Maintenance/Repair {34}

195. Rail Vehicle Engineering {8}

Y. Oil/Mining/Plastics/Chemicals {5}

196. Mining/Quarrying/Extraction {27}

197. Oil & Gas Operations {14}

198. Chemicals/Materials Engineering {26}

199. Metallurgy/Metals Production {19}

200. Polymer Science/Technology {15}

Z. Transport Services {8}

201. Transport (General) {11}

202. Freight Handling {13}

203. Aviation {35}

204. Marine Transport {66}

205. Rail Transport {16}

206. Driving/Road Safety {18}

207. Road Transport Operation {18}

208. Motor Trade Operations {7}

Data Research and compilation by *i Watch*
Research Team

Implementation of Vocational Education & Training - VET

For employment generation Some suggestions and action Plans

1. Consider change of Description from VET to TAFE

Change the name of VET to *Technical and Further Education* or TAFE. During the last 67 years the word 'Vocational Education' has not worked to enthuse our politicians, officials, parents, teachers and students.

The word 'Vocation' does not command the respect which a B.A. or B. Com degree does. This needs a mind set change. Therefore the word **TAFE** (also used in Australia, for example) may work much better!

2. Number of active VET courses world wide are about 3000

Around the world there are nearly **3000 VET courses** which breakup into 15,000 detailed modules. In India we have hardly recognized 400 courses so far. Additional 150 VET courses are conducted by more than 17 different ministries of the Government of India. Then there are the private players in small pockets. There is no catalog of what is available.

3. VET Law

A law needs to be passed in order to make it mandatory that any one wanting to start a business or to get employment needs to have some **skill** or **competence** or know a **trade**.

4. 80% to 90% of the population should learn VET

In the EU or USA or Japan or even in China, Malaysia, Korea etc, nearly **70% to 95%** of the work force have learnt some sort of VET course. In Germany 65% of the work force are VET qualified. In Austria it is as high as 80%. Hardly 10% to 20% go in for higher education.

In India all the persons passing 10+2 opt for higher education and want to enter college! Hardly **2% to 3%** opt for VET courses after 8th to 12th class.

5. Mapping of Enterprises within blocks / districts / states

Mapping of all enterprises employing more than one employee should be undertaken, block wise, district wise and state wise. The enterprise nomenclature needs to be standardized. We could take a cue either from USA, EU or UK.

This is where the youth would be doing their practical training and on-job hands-on practical work.

In Austria, a country of only 8 million people or 80 lacs population there are nearly 30,000 people undergoing Vocational Training at any given time in 38,000 enterprises and learning the theory in about 5000 VET Institutions.

Total membership of CII+FICCI+ASSOCHAM = 9000 members. They cater mostly to organizations of the organized sector, which employ about 6% of the workforce. 99.7% of all organizations in the world are MSME's, so also in India. Nearly 95%-97% of all new employment is taking place in MSMEs in India. Most of them are in the unorganized sector.

In China, EU, USA, etc nearly 7% to 13% of the working population is doing some sort of VET at any given time. In other European countries, like Switzerland, the VET population under going training is nearly 12% to 13% of the work force!

In contrast in India hardly 4 to 5 million people out of a population of 1,225 million are doing some sort of VET. This comes to about 0.60% of our work force are engaged in some sort of VET!

We suggest breakup of enterprises as follows, 1-9 employees, 10-49 employees, 50-249 employees, 250-499 employees and 500 and above. This includes all businesses, trade and Industry.

6. Mapping of VET Institutions

Mapping of all VET Institutions within a village, town, city, block, district and State is required. This is not known at present.

How does one know the physical location, types of courses available, infrastructure of the Institute, duration and cost of the courses, list of trainers and teachers, type of certification and affiliation etc?

The classification needs to be broken into the lines of the EU classification as it covers a variety of regions and geographical areas with different languages and cultures.

7. Start Early with Pre Vocational courses

Pre-VET courses should start from class 8th onwards. These need to be imparted for classes 8th to 12th, with option to start regular courses any time from this stage or plan for Higher Education in a University. Schools need to have full time councilors who can continuously guide the youth about the scope and prospects of each type of vocation.

8. Enterprise Skills development or ESD

ESD must be started in all schools from Class 5th onwards. Module 1 for classes 5th to 8th and Module 2 for classes 9th to 12th. Please see www.deispune.org for details.

Presently 60% of the total employment is self-employment therefore ESD is essential to be imparted at an early age.

It does not matter if one plans to take up a job or is self employed, ESD also helps in personality and self development.

9. Tapping and merging existing Skill Sets in Rural India

India has a very diverse and rich heritage and history of village and local trades and crafts. For example, **brass ware** in Moradabad.

India is the repository of thousands of types and descriptions of rural and village arts and crafts which have been handed down since ages and still preserved in many pockets within the country.

All of these activities need to be modernized and connected to the nearest school, vocational Institute in the local area.

After modernization, many of these crafts and trades would lend themselves for products and services for domestic and export markets.

10. Distance Learning must be enlarged

IGNOU and NIOS have done remarkable work in the last two decades. Their models of imparting knowledge for VET are scalable and have the capability to reach every nook and corner of India.

They need to put at least 5% of their budgets for promotion and marketing.

The total penetration of their activities and the presence of their foot-print across the 600 districts is still not enough.

We must ensure that in the present 12th Plan, the reach of these two networks covers the entire physical space of our Nation, whatever be the cost.

The past budgets should not be used as benchmarks for planning the future. Look at the new world class technologies, such as **Dynamind-e-Teacher** from www.i2k.in, a 100% Indian development.

11. Indian Languages are a must

Courses, course and teaching materials must be converted into all 12 major Indian languages such as Hindi, Urdu, Punjabi, Assamese, Bengali, Oriya, Gujarati, Marathi, Tamil, Telugu, Kannada and Malayalam, etc

English is only understood by 7% to 8% of the population.

The importance of regional Indian languages cannot therefore be undermined.

12. Mindset Change

It is important to have a 5-year campaign on TV, Radio and Print media for show casing the advantages of **Skills Development** for the unemployed, the business enterprises, the competitiveness of Indian organizations, for society and the Nation at large. With VET all stake holders are winners.

13. Extensive use of TV & Radio for imparting Skills

In China the number of TV as well as Radio programs for VET skills is probably 50 to 100 times more than in India.

Indian TV and Radio is cluttered with hundreds of movies and soap operas when millions of people are

starving and nearly 50% of the working population is unemployed

14. Priority #1 – Functional Literacy to reach 100%

The Government should concentrate in imparting functional literacy for all the people. While we are busy talking of secondary and higher education, we have still not reached 100% Functional Literacy of our population.

The absence of which is leading to multiple problems such as Communication, Training, Education, Population, Environment, Un-employment, Terrorism & Naxalism, Health & Hygiene, shortage of trained manpower and other related issues such as absence of excellence, innovation & productivity.

15. Chambers of Commerce to have a common Minimum Program for HRD & Training of Human Resources

The Chambers of Commerce in the country, due to historical reasons, for the sake of survival of the domestic businesses, are scattered into many economic areas of the economy.

They need to have a common meeting point and have common agenda for the Nation as far as Human Resource Development is concerned.

In most developed countries, nearly 10% to 12% of the activity of the Chamber is to network the youth into member organizations for doing practical training and getting hands down experience for VET.

In the long run this is one low cost option which is a win-win situation both for the employers as well as the human resource in the market place.

The present reach of the four main Chambers, CII, FICCI, ASSOCHAM, PHDCC&I is limited as in total they only have 9000 members and about 15,000 indirect members. In Germany for a work force of 42 million there are 100,000 VET centres of learning while 500,000 companies and 480 chambers of commerce participate in training. 3,000,000. Companies are registered with the Chambers of commerce. They are all classified into size and types.

Most of the **existing employment** is in the unorganized sector about **93%**. Most of the **new and future employment** will also be in the unorganized sector of the economy. This is expected to be about **96%** of all future employment.

The large organizations in India such as Tata's, Birla's etc have in-house VET training facilities, as they can afford it. But they are not the large employment generators for the future.

The real employment will be in the unorganized sectors of the economy, eg the small medium enterprises or **MSME's**.

The **other option** is to spend a lot of money to set up thousands of VET centers which have the entire infrastructure, like a real life enterprise.

India may have to adopt this path for the sake of future employment in the MSME's for some types of skill sets.

16. Importance of MSME's & their close connection with VET

99.7% of all organizations in the world, India is no exception to MSME's. Only 0.3% of all organizations in the world are large.

It is estimated that nearly **80% of all new employment** in the next 25 years will be absorbed in the MSME sector of the economy.

Unfortunately we are still far from the required definition of an MSME. We are no way near the Global Standards. We mean not only in quality and productivity but also in definition and size.

For details please see the three articles on MSME's detailed in this book.

The breakup of the economy into 1200 distinct economic sectors and the very close interconnection of say 1200 VET programs and courses has still not been fully absorbed and implemented within India.

Kindly see www.sba.gov for USA and www.smallbusinesseurope.org and www.esba-europe.org for EU countries for the definition and importance of MSMEs.

17. Operate existing infrastructure at optimum capacity

We need to use the existing physical infrastructure, like land and building with installed equipment, at peak capacity. Use of up to 18 hours per day is desirable, as it will reduce cost and allow for quicker implementation of education and training programs in the entire range of HRD. Presently the Ministry of HRD and Labour do not allow existing infrastructure where their courses are being imparted to be used for other courses! **This needs change.**

Definitions used in the area of **Education & Vocational Training**

1. **Education**

A process of teaching, training and learning, especially in schools or colleges, to improve knowledge and develop skills.

2. **Skill**

The ability to do something well

3. **Skilled**

Having enough ability, experience and knowledge to do something well.

4. **Competence**

The ability to do something well. A skill that you need for a particular job or a particular task.

5. **Competent**

Having enough skills or knowledge to do something well or to the necessary standard.

6. **Knowledge**

The information, understanding and skills that you gain through education or experience.

7. **Trade**

A Job, especially one that requires working with your hands and that requires special training and skills.

8. **Train**

To teach a person the skills for a particular job or activity; to be taught in this way.

9. **Training**

The process of learning the skills that you need to do a job.

10. **Vocation**

A type of work or way of life that you believe is especially suitable to you.

11. **Vocational**

Connected with the skills, knowledge, etc. that you need to have in order to do a particular job.

These have been taken from the Oxford English Dictionary

The definitions of **Trade, Train, Training, Vocation & Vocational** make interesting reading as it clearly points out that these terms are related to **employment and income generation**.

On the other hand **Education, Skill, Knowledge** and **Competence** may or may not be directly connected with employment and income generation !

Many readers and scholars sometimes are not able to fully understand the need and advantages for Vocational education & training, VET.

VET is directly linked to employment generation and wealth generation

In developed countries nearly 70% to 95% of the work force is vocationally trained.

In developed countries one cannot seek a skill base job or start a business of one's own without the relevant vocational education and training qualifications.

In the Asian Tigers and developing countries the same type of work culture and work rules seem to be enforced, as one sees a surge in vocational education & training.

The quality of Human Capital is directly responsible for quality of products and services as well as competitiveness of organizations and lower costs of production and manufacture of enterprises where such high quality of work force is engaged.

In developed countries the total expenditure towards Innovation, R&D, VET and Education is inching towards 12% of GDP.

The break-up is about 6% of GDP for general primary, secondary and higher education, 3% of GDP for VET and additional 3% of GDP for R&D & Innovation.

This includes total expenditure by public and private funds.

China at a glance

Vocational Education & Training and the Economy

Economic Data

1. Land area **9.597 million sq km**
2. Arable land **14.86%**
Permanent crops 1.27%, other 83.87%
3. Irrigated land **0.546 million sq km**
4. Population **1,343 million**
5. Median age **35.5 years**
6. Literacy **92%**
7. GDP **6,989 US\$ billions**
8. GDP **11,200 US\$ billions (PPP)**
9. GDP - per capita **US\$ 8,400 (PPP)**
10. GDP by Sector
Agriculture 10%, Industry 47%, Services 43%
11. Labour Force **816 million**
12. Labour force by occupation
Agriculture 36%, Industry 29%, Services 35%
13. Population below poverty line **13%**
14. House hold income
Lowest 10%...3.5%, Highest 10%...15%
15. Inflation Rate **5.4%**
16. Exports **US\$ 1,898 billion**
17. Reserves **US\$ 3,236 billion**
18. Telephone - land line **294 million**
19. Telephone - mobile **859 million**
20. Internet users **389 million**

Vocational Data

1. Labour Force as % of Population **60.7%**
2. Number of people undergoing VET courses in the institutions **80 million**
3. Percentage of work force undergoing some sort of VET course **11.27%**
4. Number of VET Institutions in China **5,00,000**
5. About **3,50,000** out of the above are in rural China. No wonder that the productivity of farm land in China is more than double than that of India.
6. Oldest VET Institutions and VET system in the country, more than **60 years**
7. Number of VET courses being imparted in the country, more than **3000 types***
8. Cost of imparting VET courses. Federal & State Govts, % of Total Cost **70%***
9. Cost of imparting VET courses Local Community, Business, Private, % of Total Cost **30%***
10. Design and scope of VET courses decided by local community & local businesses and by local state governments based on availability of local resources and local needs of the economy
Yes!

*estimates only

<1 billion = 1000 million> <1 million = 10 lacs> <1 crore = 100 lacs = 10 million> <1 US\$ = Rs. 64 (approx)>

Germany (representing the EU) at a glance

Vocational education & Training and the Economy

Economic Data

1. Land area **0.357 million sq km**
2. Arable land **33.13%**
Permanent crops 0.6%, other 66.27%
3. Irrigated land **0.005 million sq km**
4. Population **81.30 million**
5. Median age **44.90 years**
6. Literacy **99%**
7. GDP **3,629 US\$ billions**
8. GDP **3,085 US\$ billions (PPP)**
9. GDP - per capita **US\$ 44,640**
10. GDP by Sector
Agriculture 0.8%, Industry 28%, Services 71.2%
11. Labour Force **43.54 million**
12. Labour force by occupation
Agriculture 1.6%, Industry 24.6%, Services 73.86%
13. Population below poverty line **15.5%**
14. House hold income
Lowest 10%...3.6%, Highest 10%...24.0%
15. Inflation Rate **2.2%**
16. Exports US\$ **1,408 billion**
17. Reserves **US\$ 216 billion**
18. Telephone - land line **46 million**
19. Telephone - mobile **105 million**
20. Internet users **65 million**

Vocational Data

1. Labour Force as % of Population **52.97%**
2. Number of people undergoing VET courses in the institutions **2.85 million**
3. Percentage of work force undergoing some sort of VET course **6.53%**
4. Number of VET Institutions in Germany **100,000**
5. Oldest VET Institutions and VET system in the country, more than **100 years**
6. Number of VET courses being imparted in the country, more than **4000 types**
7. Cost of imparting VET courses. Federal & State Govts, % of Total Cost **33%**
8. Cost of imparting VET courses Local Community, Business, Private, % of Total Cost **67%**
9. Design and scope of VET courses decided by local community & local businesses and by local state governments based on availability of local resources and local needs of the economy
Yes!

<1 billion = 1000 million> < 1 million = 10 lacs> <1 crore = 100 lacs = 10 million> <1 US\$ = Rs. 64 (approx)>

USA at a glance

Vocational Education & Training and the Economy

Economic Data

1. Land area **9.82 million sq km**
2. Arable land **18.01%**
Permanent crops 0.21%, other 81.78%
3. Irrigated land **0.223 million sq km**
4. Population **314 million**
5. Median age **36.9 years**
6. Literacy **99%**
7. GDP **15,060 US\$ billions**
8. GDP **15,040 US\$ billions (PPP)**
9. GDP - per capita **US\$ 47,900**
10. GDP by Sector
Agriculture 1.2%, Industry 22.2%, Services 76.6%
11. Labour Force **153 million**
12. Labour force by occupation
Agriculture 0.7%, Industry 20.3%, Services 79%
13. Population below poverty line **15%**
14. House hold income
Lowest 10%...1.8%, Highest 10%...30.5%
15. Inflation Rate **3%**
16. Exports US\$ **1,511 billion**
17. Reserves **US\$ 600 billion**
18. Telephone - land line **151 million**
19. Telephone - mobile **279 million**
20. Internet users **245 million**

Vocational Data

1. Labour Force as % of Population **50.67%**
2. Number of people undergoing VET courses in the institutions **11.3 million**
3. Percentage of work force undergoing some sort of VET course **7.48%**
4. Number of VET Institutions, commonly called as community colleges, in Multiple Campuses **1600**
5. Oldest VET Institutions and VET system in the country, more than **100 years**
6. Number of VET courses being imparted in the country, more than **4000 types**
7. Cost of imparting VET courses. Federal & State Govts, % of Total Cost **33%**
8. Cost of imparting VET courses Local Community, Business, Private, % of Total Cost **67%**
9. Design and scope of VET courses decided by local community & local businesses and by local state governments based on availability of local resources and local needs of the economy

Yes!

<1 billion = 1000 million> <1 million = 10 lacs> <1 crore = 100 lacs = 10 million> <1 US\$ = Rs. 64 (approx)>

India at a glance

Vocational Education & Training and the Economy

Economic Data

1. Land area **3.29 million sq km**
2. Arable land **48.83%**
Permanent crops 2.83%, other 48.37%
3. Irrigated land **0.558 million sq km**
4. Population **1,225 million**
5. Median age **26 years**
6. Literacy **61%**
7. GDP **1,853 US\$ billions**
8. GDP **4,463 US\$ billions (PPP)**
9. GDP - per capita **US\$ 3,700 (PPP)**
10. GDP by Sector
Agriculture 18%, Industry 26%, Services 56%
11. Labour Force **490 million**
12. Labour force by occupation
Agriculture 52%, Industry 14%, Services 34%
13. Population below poverty line **25%**
14. House hold income
Lowest 10%...3.5%, Highest 10%...33.5%
15. Inflation Rate **6.8**
16. Exports **US\$ 298 billion**
17. Reserves **US\$ 300 billion**
18. Telephone - land line **35 million**
19. Telephone - mobile **850 million**
20. Internet users **61 million**

Vocational Data

1. Labour Force as % of Population **45%**
2. India has one of the lowest productivity index in the world. Please details on page 87. Hence the need for VET!
3. Number of people undergoing VET courses in the 'organised sector' about **5 million {& 45 million in the 'unorganized sector'}** (estimated)}
4. Percentage of work force undergoing some sort of VET course **8% to 10%**

Nearly 17 Ministries of the Government seem to be imparting VET courses. The largest are the Ministry of Labour and the Ministry of HRD.

Number of VET Institutions in India. Figures not known. Ministry of labour has 9,500 ITI's. Ministry of Education has about 700 Polytechnics and about 6000 Vocational schools. Data from other ministries not known.

30 million is the labour force within the organized sector. Most of them have elaborate in-house training. This data is not collated.

Nearly 460 million work in the 'unorganised sector'. All the informal VET takes place here. This data is not recorded.

There are an estimated 50,000 I.T. and software related training institutions imparting I.T. related courses to a few million people.

In November 2006 the Prime Minister has directed a Task Force to study and suggest ways to improve both the quality and quantity of VET for the country's labour force.

Significant positive changes are expected during the 12th Plan period. NSC and NSDC set up in 2009.

<1 billion = 1000 million> < 1 million = 10 lacs> <1 crore = 100 lacs = 10 million> <1 US\$ = Rs. 64 (approx)>

Relevant Education & Training of our Human Capital

300 million are unemployed or underemployed Yet there is a shortage of trained man power? **Answer lies in vocational training**

As an ex-CEO of a few companies, my experience is that out of all the **three major resources** required to run an organization or a Nation which are:-

1. Financial

2. Material

3. Human

The last one is of **75%** importance!

Look at examples of Japan, Germany. Japan is the 2nd largest and Germany the 3rd largest economy in the world today! Both are 11% to 12% the size of India! South Korea which has a big GDP but only 3% in size to India!

All of them have **no mineral wealth** or **Oil, Coal & Gas**, unlike India which has a lot of mineral wealth and a lot of coal & some oil and gas.

The first two countries were destroyed in the 2nd world war while South Korea suffered a 10 year war with North Korea!

You would have come to the conclusion by now, that the **Best & Most Progressive Organizations** are the ones who depend upon the **Quality & Enlightenment** of their **Human Capital** and NOT on the other two resources, such as **finance & material**?

Financial & material resources can be generated automatically by qualified **Human Capital**.

What ails India is inadequate quantity of **enlightened, educated and Trained Human Capital in the right place**. Please see below some bullet points of some important aspects:-

1. India has the **demographic advantage** of an average age of **26 years** of its population.
2. **Are we working fast enough** to take advantage of this fact?
3. If you do a survey of all the Chambers of Commerce in India you will find that they all have a **large number of committees** and **sub-committees**; but very few on **Human Capital Development** such as Education, Training and life long learning!
4. With this note we are requesting that they (Chambers of Commerce) should have at least 5-committees on **Human Resource Development** i.e., on 1. **primary**, 2. **secondary**, 3. **vocational**, 4. **higher education** & 5. **life long learning**.
5. Indian companies (Pvt. Sector) are ready to **poach employees from other competitors**, especially from the hard working MSME's, are ready to keep on increasing the salary of their personnel 2 to 5 times the Indian inflation rate, year on year (especially since the last 15 years)
6. Unlike the EU & USA **Indian Business does not participate** in building up **Human Capital** from within the country. Large Indian organizations train & skill only for their internal needs!
7. **Attrition rates**, in the organized sector are high which relates directly to shortage of trained employees. This is an absurd situation, considering that nearly **300 million** people of India are unemployed!
8. **44,000,000 people are registered with the employment exchanges**, but unemployable, as they have no skills or inadequate or obsolete skills or irrelevant skills!
9. Another **260,000,000 Indians are available in the age group of 16 years to 50 years**, who are NOT registered with the exchanges; most of them are under employed / illiterate or sick and / or unskilled in any skill or vocation. Because of lack of relevant skills they are NOT employable.
10. Relevant skills are required. China has 500,000 vocational institutions (70% in Rural China) training 80,000,000 people per year. Their total workforce is about 816 million people.
11. India has about 12,000 ITI's & ITCs under the Ministry of Labour. They train about 2.10 million people per year. Another 2.90 million are trained. by 17 other ministries of the Government of India. **This makes a total of about 5 million for a workforce of about 490 million.**

12. Presently hardly **3% to 4% of our work-force** is formally trained in relevant skills, mostly in the organized sector, compared to about **96% in S. Korea**, and **60% to 80% in the EU & USA**.
13. The **IT related business** cannot find 100,000 to 300,000 people per year!
14. The **Financial Services** cannot find 200,000 to 500,000 people per year!
15. The **Hospitality & Travel Industry** cannot find 50,000 people per year.
16. The **Construction** business cannot find 100,000 people per year?
17. The **Retail, wholesale & Logistics** business cannot find 100,000 people per year.
18. **The Manufacturing Sector** cannot get 100,000 trained people per year.
19. Because of the above, **attrition rates** within the organized private sector in India are very high!
20. In spite of the fact that 28,000,000 are born every year in the country!
21. Many operations from India will **become uncompetitive**, although the average earning of an Indian is only US\$ 4.10 per day!
22. We have amongst the **lowest productivity rates** in the world.
23. The importance of **Skills Building** cannot be therefore over-emphasized.
2. India has nearly **200 million MSME's** where nearly **94%** of the workforce is located!
3. **80% of the MSME's** are in the Plantation & Agriculture Sector. **80% of our Skill Centers** should be located in Rural India. Here is where **rural productivity** can be increased by 300%!
4. These apprentices should be paid 50%, 75% and 100% of Min. wages in the 1st, 2nd & 3rd years respectively. **93% of our workforce is with the MSME's** (Micro, Small & Medium Enterprises) they must be allowed to use this scheme.
5. That is why India needs **a large number of VET Institutions**, about 500,000, where these apprentices can learn the soft skills, safety and the theory of their VET courses.
6. In the EU and USA nearly 60% to 80% of VET costs are borne by the **Employer organizations**. The same needs to be done in India under the **PPP or Public-Private-Partnership** mode.
7. The school system should introduce **Pre-Vocational courses & Enterprise Skills Education** from Class 8th and allow the youth to get introduction into skills building courses from class 8th - 10th onwards.
8. Implementation of **Multiple Intelligences** in secondary schools is a must.
9. 60% of all our work force is self-employed and therefore **Enterprise Skills Education, ESD**, from Class 8th is important. ESD is required for all, whether you are self-employed or otherwise.
10. I would be happy if this message could be communicated to the **Managing Committee** of different **Chambers of Commerce, Trade Unions** and **Business Organizations**.
11. Consider 20 years of Tax-Breaks for private investments in all forms of **Skills Training**.
12. For more details visit us at www.wakeupcall.org and get detailed information in our 142 page book titled - **"Transforming INDIA through relevant education & vocational training."**

Suggestions and recommendations In the area of **Skills Building** for Employment Generation

1. **The way forward** is to have a **National** Apprentice Scheme, where all employers, MSME's to Large, are allowed to recruit apprentices of 10% to 15% of their workforce for a period of 3-years.

India's Labour productivity

w.r.t. EU-BRIC-USA-Japan-Korea-Canada & Australia

Country	Human Developm. Index 2004 <small>(combines economic, social & educational indicators; 177 countries)</small>		Real GDP growth per capita 2005/04 <small>based on national currency in constant prices</small>		Labour productivity per hour 2005 <small>GDP (PPP) per person employed per hour</small>		Employment growth 2005/04	
	Index	Rank	% change	Rank	US\$	*Rank	%change	Rank
Luxembourg	0.945	12	2.5	19	58.3	1	1.8	10
Ireland	0.956	4	2	21	47.2	2	4.7	2
France	0.942	16	0.8	32	46.1	3	0.4	27
Norway	0.965	1	1.7	25	45.7	4	0.6	25
Belgium	0.945	13	1.7	25	45.5	5	0.9	21
USA	0.948	8	2.5	19	44.9	6	1.8	10
Austria	0.944	14	1.3	29	43.4	7	0.3	29
Italy	0.94	17	-1	36	40.7	8	0.7	23
Denmark	0.943	15	3.1	15	39.3	9	0.6	25
Finland	0.947	11	1.8	24	38.9	10	1.5	12
Sweden	0.951	5	2	21	37.5	11	1	19
Netherlands	0.947	10	0.6	34	37.3	12	-0.6	36
Iceland	0.96	2	3.1	15	37.0	13	3.3	4
Germany	0.932	21	0.7	33	36.4	14	-0.2	35
United Kingdom	0.94	18	1.5	27	36.3	15	1	19
Australia	0.957	3	1.4	28	35.6	16	3.5	3
Canada	0.95	6	2	21	34	17	1.4	13
Spain	0.938	19	1.3	29	33.5	18	4.8	1
Greece	0.921	24	3.5	13	33.4	19	1.3	15
Japan	0.949	7	2.7	18	32.4	20	0.4	27
Switzerland	0.947	9	1.2	31	31.5	21	0.1	31
Slovenia	0.91	27	3.7	11	24.9	22	-0.1	34
Hungary	0.869	35	4	10	22.5	23	0	33
Portugal	0.904	28	0	35	22.4	24	0.1	31
Czech Rep	0.885	30	5.7	7	22.4	24	1.4	13
Slovakia	0.856	42	6.3	4	20	26	2.1	8
Korea	0.912	26	3.5	13	19.8	27	1.3	15
Estonia	0.858	40	9.9	1	19.5	28	2	9
Croatia	0.846	44	4.3	8	19.5	28	0.2	30
Poland	0.862	37	3.1	15	18.7	30	2.3	6
Russia	0.797	65	6.7	3	12.6	31	1.2	17
Turkey	0.757	92	3.7	11	12.3	32	1.1	18
Bulgaria	0.816	54	6	6	10.6	33	2.2	7
Romania	0.805	60	4.3	8	10.4	34	0.7	23
China	0.768	81	9.3	2	5.4	35	0.8	22
India	0.611	126	6.1	5	3.5	36	2.5	5

One will notice from this table that the labour productivity of India is in the last position. To improve this, India would have to concentrate on primary, secondary, ESD, VET and higher & technical education. **Human development** will be the key driver.

Youth Counselling - Who am I?

This question is for those who may have passed their 10th, 11th or 12th and wish to move on in life. This self analysis is recommended for those applying for higher studies or even for jobs as trainees or apprentices in business or industry.

It also useful for those who wish to be self employed or plan to work in their family business.

In answering these questions, you will probably find that you have a great deal to talk about, at least for five to six topics: find one topic that will allow you to synthesize your important personal characteristics and experiences into a coherent whole while simultaneously addressing your desire to attend a specific institution or work with a specific organization or pursue a particular vocation in life.

Always remember that to excel in life you need to follow your dreams and ambitions. Your work or vocation in life must be like play!

For each of the personal characteristics or skills listed below, try to answer as honestly as possible?

1. Does it distinguish me from others I know?
2. How did I develop this attribute?

For each of the activities you have listed, ask?

1. What made me join this activity?
2. What made me continue to contribute to it

For each event in your life you have listed, ask?

1. Why do I remember this particular event?
2. Did it change me as a person?

3. How did I react?
4. Was the event a moment of epiphany, as if my eyes saw something to which they had previously been blind?

For each person you have listed, ask?

1. Why have I named this person?
2. Do I aspire to become like this person?
3. Which of this person's traits do I admire?
4. Is there something that this person has said that I will always remember?
5. Did he or she challenge my views?

For each of your favorites and least favorites, ask?

1. Why is this favorite or least favorite?
2. Has this thing challenged my life in a meaningful way?

For each failure, ask?

1. What if anything did I learn from this failure?
2. What if anything good came out of this failure?

Brain Storming

1. List 5 personal Characteristics or skills?
2. List all activities since class 9?
3. List the important events in your life?
4. List persons who have made a difference in your life?
5. List things you like and dislike?
6. List your failures, if any?

Youth - How to, prepare your CV?

These are some general facts which need to be addressed. It will help the person/youth concerned as well as those with whom the youth will be interacting in the outside world.

AAA...General

1. Full name
2. Home mailing address
3. Contact Telephone number
4. Email contact

BBB...Schools attended (give dates)

1. Name of school
2. Address of school
3. Phone number of school
4. Name of Principal and contact details
5. School Board code
6. Subjects in year 10
7. Subjects in year 12

CCC...College Board Scores

1. SAT scores (composite, critical reading, Maths, Writing)
2. Subject Test Scores (Composite, English, Reading, Maths, Science, etc)

DDD... High School Activities - Extra Curricular Activities

1. Art
2. Music
3. Drama

4. Quizzing
5. Public debating
6. Clubs
7. NCC

EEE... Sports Activities

(both in and out of school. For each year give separate details, especially for the last 5 years in school)

1. Swimming
2. Athletics
3. Hockey
4. Football
5. Basketball
6. Cricket
7. Badminton
8. Tennis
9. Indoor games

FFF... Summer Activities

GGG...Community Service

HHH... Special Projects

III... Awards and Honors

JJJ... Experience

KKK... Employment History

LLL...Travel experience

Skilling 20 million people per year

What do we need to do to achieve this higher rate of growth in skills? Here is our eleven point program.

First, mindset change. The school dropout rate in India is nearly 88% from class I to class 12. This includes children who have never attended school. Most of civil society, teachers and parents feel compelled to force the youth who cross the 12th to go to college education. Most of the students opt for BA, BSc, BCom, Eng, Medical, MBA or IT. The GER rate in India is about 20%. But hardly 15% to 20% of the graduates are employable. Quality is low. Effective GER is hardly 3% to 4%!

This is not what happens in the most advanced countries of the world, e.g. Germany, Switzerland, etc., where the GER is only 20% and balance 80% opt for skills after class 8th. The **advantages of VET and skills need** to be communicated to all stakeholders of the economy. Unfortunately, in India we promote ONLY College education & NOT vocational education and training. It should be the reverse! **In Germany, Austria, Switzerland and other EU countries the GER is about 20% and balance is VET of 80%!**

Second, accelerate pre-primary, primary and secondary education to achieve at least 90% to 95% literacy in the shortest possible time. Unless we have close to 90% functional literacy or more, we cannot think of having efficient skills quality. The Asian Tigers and advanced countries have already **crossed the 90% mark** many years ago.

Third, start enterprise skills education or some form of entrepreneurship early in school. In the EU and many other countries it starts from as early as class I. We should plan from class 5th onwards. Whether you are self employed or are in a job **it is always advantageous to be enterprising.**

Fourth, start pre-vocational courses from class 8th onwards. Experience has shown that young minds want action and something to do. We should expose the youth, parents and teachers to the various 21 or 23 verticals of the economy and **showcase the 400 most important skills which run the economy.**

We should not force the children for only academic pursuits, where high marks in exams, is a criteria for achievement. This needs to change, allow the youth to follow their passion. **Ultimately work must be play if we have to achieve excellence in life.**

Fifth, Integration of skills with local business. The large organized public and private sector only employs 6% of the total workforce of 489 million people. They do not have to be preached about skills, they have had it for many years, inside their own organizations.

The real challenge lies with the 200 million MSME's out of which 80% are in plantations and agriculture and 20% in services and manufacturing. 289 million workers are in agriculture and about 60 million workers in manufacturing and 140 million workers in services. The challenge is to reach out to them and bring them, **the unorganized sector,** into skills building and the main stream modern economy.

In Germany, for example, about 500,000 companies (99% are MSME's) are involved to give practical training to about 3 million apprentices who get practical in-house training here and theory in about 100,000 VET centres.

Sixth, Mapping of all enterprises with local chambers of commerce. How will we ever know where, who, what are these 200 million MSME's unless we find a way to

bring them into an organized collective format. Let them be unorganized but we need to know who they are, what they do and how we can help them?

In the EU, we were informed that all MSME's are identified as they are a member of some local chamber of commerce. In this respect all chambers work in tandem. **In Germany, for example, nearly 4 million members are registered with the Chamber of Commerce, more than 99% are MSME's!**

Maharashtra alone has 120 million people and probably more chambers than Germany? India may have a few hundred chambers all over. How do we bridge them together to map the economic and human assets of our Nation?

Can CII/FICCI/PHDCC&I/ASSOCHAM/BCC&I/IMC/MEDC/ICC and other chambers with a collective rich experience take the lead with other important chambers to bridge this knowledge gap? **So that we know where our human assets are, what do they do, how do we build them up?**

Seventh, "Apprentice Act" may need some modifications. Can we allow existing organizations to have up to 10% of their work force as apprentices?

Can such apprentices stay with organizations for a period of 1 to 3 years provided they are paid a stipend equal to or less than the minimum wages in that part of India? The stipend will be paid by the employing organization.

Can these apprentices be trained and given on-the-job training without any obligation of the employer that all apprentices so trained with them will get a permanent job after completing the apprenticeship? All stake holders need to put their minds together to find practical and long lasting solutions to this aspect.

Such apprentices will be out of the existing controls and regulations of existing **"Labour Laws"**. **This one change will trigger off the employment of about 45 million apprentices, especially in the Agriculture, Manufacturing and Services sectors.**

Eighth, Setting up Skill centres in PPP mode. For providing theory and learning we may need up to 500,000 centres across the nation, where skills are taught. In China there are 350,000 skill centres in rural China and 150,000 in urban China. An average Chinese farmer produces nearly 2 to 3 times more farm produce measured on a per acre basis than an Indian farmer. We believe, though Indian farmers need micro finance they need **Primary Education and Skill Building** in the first place. Even a small country like Switzerland has 6,000 VET centres

Ninth, Skills in local languages. Skills will have to be imparted in local 12 if not in the 22 languages recognized by our constitution. **Only 8% of Indians understands English.**

Tenth, Setting up skills councils in 21 or 23 verticals. I believe that the Ministry of Labour, MHRD, MoF and 17 other Ministries with NSDA and NSDC, are working on this with CII, FICCI and others. We fully support this initiative and we all look forward to the final conclusions. Once these **Skill Councils** are set up and fully operational the rest will follow, like curriculum, accreditation, examinations, competencies, etc.

Eleventh, Learning from the world leaders. India has been a late starter in the area of skills. We need to learn from all and the best of the best, whether it is USA, UK, Australia, Canada, Germany, Korea, Japan, France, Switzerland etc. In the USA, EU, Japan and other developed countries **the expenditure on Skills is nearly 3% of GDP; we have a long way to go.**

Section-6

Conclusions & Actions

*Into that heaven of freedom, my Father,
let my country awake.*

	Page No.	Overview
1. <i>i Watch</i> focus areas	90	The agenda for transformation of India is quite simple. The focus is on the empowerment of its people through relevant education and vocational training. Human assets are the most important asset of any nation.
2. Agenda for Transforming INDIA	92	Financial and material assets can be created and organized if the people are empowered.
3. Action Plan for GDP growth of 10% to 14%	94	The three articles explain and emphasize the importance of six priority areas of human resource development, good governance, certain central government policy changes, importance of exports in different sectors, funding infrastructure with low cost and long term bonds and finally creating awareness across all the twenty nine states and six union territories of the importance of all these measures.

i Watch Focus areas

Education

We work on this issue because...

1. Drop-out rate between KG to Class 10+2 is 88%, includes those who have never attended school.
2. 'License Raj' and regulation in Higher, Medical and Technical education, restricting growth, R&D, quality and capacity.
3. Cash out-flow of about Rs. 90,000 crores or US \$15 billion per year for Indian students leaving India for foreign Universities, because of lack of seats and quality education within India. These funds enough to build 50 IIM's & 30 IIT's per year! It is estimated that about 260,000 students leave every year for foreign studies. 50% opt for a two year Masters course and the balance 50% for a four-year Undergraduate course.
4. Functional literacy expected to be about 33% against Government's figure of about 67%, but China close to 93%.
5. Inadequate skills development. Hardly 0.5% of the work force are being trained at any given, in the organized sector, versus the required 7% to 10%, as in China and other developed countries
6. India has 27,000 foreign students while Australia has 400,000 foreign students
7. India has 1.7 million schools vs 2.5 million in China
8. India has 563 Universities vs 1100 in China
9. Pre-Primary not given importance. 90% of the human brain developed between the age of 1 to 6.

Governance

We work on this issue because...

1. Rs. 4,200 crores or US\$ 0.72 billion spent everyday by the 35 states and UT's of India to run the country. Are the citizens happy?
2. Why is FDI stock into India hardly US\$ 121 billion vs US\$ 1920 billion for China + Hong Kong?
3. Tourist traffic into India is only 6 million per year vs 80 million per year into China?
4. World trade is about 2.2% against 8.0% for China.
5. Agriculture productivity in India is 40% as compared to that of China.
6. Life expectancy is 67 years vs 74 years in China.
7. Electrical loss due to transmission and other losses from electricity boards vary from 25% to 50% in India vs 6% to 8% in China.
8. Foreign exchange reserves about US \$ 360 billion for India vs US\$ 4,000 billion in China.
9. HIV/AIDS affect about 5 million people in India vs 0.85 million in China.
10. 40% of all fruits and vegetables are damaged or destroyed due to poor farm management.
11. India receives a lot of rain but because of poor water management we get floods or drought.

Economy

We work on this issue because...

1. Labour Laws do not allow level playing field for Indian organizations within present Global Economy.

<1 billion = 1000 million> <1 million = 10 lacs> <1 crore = 100 lacs = 10 million> <1 US\$ = Rs. 64 (approx)>

2. Employment generation suffers because we look at Capital Intensive businesses rather than Labor Intensive ones.
3. India has only 2.6% of world GDP. Buying power is low, but demand is high due to high population of 17%. Exports is the answer. Enough emphasis not given so far in 67 years. SEZ's need to grow faster.
4. Infrastructure is very inadequate for 1,225 million people. Lot of talk but very little implementation.
5. India needs to cash in the advantage of purchasing power parity, (PPP) for it's World Trade.
6. I.T. and software is only 5% of the Indian economy and 3% of world economy. India must look at the balance 97% of the world economy and make it World Class.
7. Advantage of MSME's not fully understood. Present definition not as per Global Standards as in EU, USA, Japan, China, etc. This is a big disadvantage to Indian business as 99.7% of all organizations in the world are MSME's. SSI's are only 5% of India's GDP while MSME's would be close to 70% to 80%. Ministry of Industry focus should change from Industry to Economy.

Employment Generation

We work on this issue because...

1. India has 44 million registered unemployed and probably another 260 million who are underemployed or unemployed in the age group of 18 to 50 years but not registered.
2. The average age of an Indian is 26 years, compared to a Chinese who is 34 years and a European, American or Japanese who may be 40 to 45 years in age. India is a very young country. We need to skill our people so that we can take advantage of so many 'Young Indians'!
3. While China spends nearly 2.5% of GDP on Vocational Education & Training (VET) in 500,000 VET centres covering nearly 3000 vocations. India hardly spends 0.1% of its GDP in VET in 12,000 centres covering about 400 vocations. The actual expenses in VET are more but data is not available!
4. Vocational education is directly connected with employment and wealth generation, unlike normal education and knowledge improvement. The benefits of VET for the common man, benefits to organizations who use skilled and trained manpower and benefits to the nation to make it globally competitive will only come about when nearly 80% of the youth, after the age of 15 years opt for VET and not for the normal college education which is B.A, B.Sc or B.Com!
5. The Demographic dividend of supplying young skilled manpower to the world markets must be seized by future Indians by using VET.
6. The present work force of 490 million can be divided into 30 million in the organized sector and 460 million in the unorganized sector. The biggest challenge facing us is to provide world class VET for the 460 million in the unorganized sector!
7. Most of the MSME's are in the unorganized sector. SME's are the real 'Dynamo' of the economy. Dovetailing MSME's with Vocational Education & Training will create one of the biggest pool of young, talented and trained manpower in the world! This will propel India forward as an economic power.
8. In countries like Switzerland & Austria there are 5000 VET centers each only for a population of 8 million each! These countries are land locked and have no mineral wealth or energy but because of high quality human resources have GDP nearly 33% and 23% of respectively of India!
9. The present "Apprentice Act" is not in line with the country's present needs. It requires to be completely overhauled so that nearly 10% of the workforce could be apprentices being trained and working at the same time.

<1 billion = 1000 million> < 1 million = 10 lacs> <1 crore = 100 lacs = 10 million> <1 US\$ = Rs. 64 (approx)>

Agenda of Transforming INDIA into an Economic Power & Developed Nation

Priority 1

Relevant HRD, deregulate H&T education & Vocational training

1. 100% Primary Functional Literacy

Learn to read and write any Indian language in 40 to 60 hours @ 1 hour per day for 5 days a week. Nearly 500 million people need to learn the 3 R's which are reading, writing and arithmetic. As per the government of India, the average literacy rate is 64%, based on the Indian definition, if you can write your name. If one uses the international definition, like minimum primary education as the criteria, the actual literacy rate would come down to 40%! We need to achieve 100% functional literacy in the next 10 years!

2. Primary & secondary education

The dropout rate of 88% in schools, from kindergarten to class 12th, must be reduced to less than 10%. This includes children who have never attended school.

3. Enterprise Skills Development or ESD.

We suggest that this should be started from class 5th right up to class 12th. ESD is 'about enterprises and how the real world works'. *Helps decide future choice of profession for the youth.* Builds confidence in oneself. Only two hours per week are required.

4. Vocational Education & Training or VET.

VET teaches the youth a *skill or a competence* or a trade. One learns to do some skilled job! In developed countries, 80% of the youth from age of 14 to 35 should go in for VET. This would mean about 50 million people per year.

5. Except for I.T., which is 2.5% of world's GDP, where there may be 50,000 private training centres operating in India; where are the training centres to run the balance 97% of the skills, trades, competences required to run the nation?

6. Liberalize Education

Decontrol and privatize all forms of education like business was in 1991! Make India an **International Hub for Education**

7. The I. T. business,

ever since inception, has been outside the control and regulation of the central and state governments. Market forces, fierce competition, and constant innovation has allowed Indian I. T. education to be world class.

8. Private and NRI participation in education

Government should concentrate up to high school only, from class 1 to 10 only. The rest they should leave to the private sector

9. Entrepreneurship Institutes in each Block

Entrepreneur promotional institutes, in all the blocks of the states. 97% of new employment is in the *unorganized sector and MSME's*. We need skill sets for the youth.

10. India will only prosper when the Goddess of Learning, 'Saraswati' is unshakled and unchained as was the Goddess of Wealth 'Lakshmi' in 1991.

Priority 2

Good Governance

Benefits of leadership and good governance are highlighted in ten different articles. If one looks at the contents page, one will notice that nearly 81% of our articles are '**People Dependant**', twelve on **Governance** and twelve on **Human Resource Development** and fourteen on **Employment Generation**!

One can understand **Good Governance**, only if we understand the **effects of bad governance**. Many such examples have been given in our articles for this very reason.

Focus on HRD,
governance,
economy and employment
generation

Priority 3

Central government policy changes

1. **Removal of SSI** (small scale industry) reservation.
Reservation does more harm than good.
2. **Amend Labour and Employee Laws** and *give local enterprises and organizations a level playing field* on par with other developing Nations of Asia and Latin America.
3. **Encourage “labour intensive”** technologies for employment generation.
4. **Recognize the meaning and importance of ‘MSMEs’** (micro, small medium enterprise) and not **‘SSIs’** (small scale industry). We must understand the importance of the **‘M’** and the **‘E’** in SME’s as **‘MSMEs’** account for 80% of the Indian economy against 5% in **SSI**. While the **MSME Bill** was passed in 2006. Indian MSMEs still have to align themselves to global standards. Large organizations **subcontract most of their non-core business** to highly productive and cost- effective MSMEs.
5. Amend Indian definition of MSME in line with the EU definition.

Priority 4

Export activities of the economy, other than software

Software and I.T. is 2.5% of the World’s GDP, we need to look at the balance 97.5% of the economic sector in the world markets!

The five areas of economic activity, mentioned below, are only some examples, there are many others.

1. **Trading, wholesale & retail**, are 15 times bigger than I.T. (big employment and GDP generator)
2. **Manufacturing**, as an enterprise, is 11 times bigger than I.T. (generates about 75% of government revenues)
3. **Health Care**, as an enterprise is 4 times bigger than I.T. (big employment and GDP generator)
4. **Travel & Tourism**, as an enterprise is 6 times bigger than I.T. (big employment and GDP generator)
5. **Education**, as an enterprise is 4 times bigger than I.T. (big employment and GDP generator)

Priority 5

Funding infrastructure - US\$ 1500 Billion ‘Special’ - Infra Bonds

Infrastructure needs funding at 6% to 8% per year, rate of interest. The tenure of borrowing needs to be extended to at least 10-15-20-25 years, since it takes nearly 5 years for ‘building’ and another 5 years for ‘Gestation and break-even’. These bonds should be of low-interest but with incentives and tax breaks.

Priority 6

Awareness program for the above 5 priority areas

By the use of our 144 page book, *Transforming INDIA through education*, awareness with relevant solutions and action plans are our prime objective.

Our book is a step in that direction. It has 94 articles and notes on Governance, Human Resource Development, Enterprise & Economy & Employment Generation.

Our website at www.wakeupcall.org details out much more than this book. Besides English, the Hindi, Urdu, Gujarati, Marathi, Tamil, Telugu, Kannada, Malayalam, Bengali, Oriya, Assamese and Punjabi versions of some relevant portions are available.

Only 8% of Indian understand English, therefore Indian languages are required.

Action Plan for GDP growth rate of 10% to 15% per year

	Suggested Priority for different areas within the Economy	%
1	Governance & Administration	10%
2	Relevant Education & Training - Primary & Secondary Education	10%
3	Manufacturing - Importance of MSME's (MSME's are 80% of GDP.)	20%
4	Travel & Tourism as an Enterprise	10%
5	Health Care as an Enterprise	10%
6	Education & Training as an Enterprise - Vocational & Higher / Technical / Medical Education	10%
7	Software & I.T. as an Enterprise	10%
8	Agriculture & related Enterprises in Rural India	20%
9	Exports of items 2, 3, 4, 5, 6, 7 & 8 Maximize! Maximize! Maximize!	↑

India's GDP is about US\$ 1,843 billion. India's Information Technology and software would be about 5 % of India's GDP.

All over the world IT & Software may only be 2.5% of the economy but they are very vital to any economy. IT & Software are like the nervous system of any economy. Modern day Agriculture, Manufacturing and all possible Services depend upon it. Nothing would work without IT.

In India, thanks to our Indian companies; IT plays a very vital role for the economy as well as many foreign economies.

However, IT is only a support and control activity and growth of IT directly depends upon the growth of the other sectors like manufacturing, services and agriculture. See below.

1. **Wholesale & Retail** Business worldwide is US\$ 17,000 billion per year. 14 times of I.T.

2. **Manufacturing** Business, worldwide is US\$ 15,000 billion per year. 12 times of I.T.

3. **Tourism & Travel** Business, worldwide, is US\$ 10,000 billion per year. 6 times of I.T.

4. **Health Care** Business, worldwide, is a US\$ 8700 billion per year. 4 times of I.T.

5. **Education** Business, worldwide, is US\$ 9,000 billion per year. 4 times of I.T.

6. **Construction** Business, worldwide, is US\$ 8,000 billion per year. 5 times of I.T.

I.T. is 2.0% to 2.5% of world GDP. Why so much importance only to I.T. in INDIA?

This is a missed opportunity for GDP improvement & employment generation in India for other sectors. Manufacturing alone accounts for nearly 70% of the Government revenues!

<1 billion = 1000 million> <1 million = 10 lacs> <1 crore = 100 lacs = 10 million> <1 US\$ = Rs. 64 (approx)>

Section – 7

CSR Projects

from *i Watch*

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Overview

In India Social responsibility has been practiced for hundreds of years. This is not a new concept for the DNA of Bharat.

The new companies Act effective the 1st of April 2014 directs private and public limited companies to spend at least 2% of their net profits, under certain conditions, for the socially deprived sections of the population. Unfortunately, this new Act does not capture proprietorship and partnership companies who constitute the majority of the commercial organizations within the country.

i Watch has been informally helping, advising and assisting individuals, NGO's and MSME's since the last 20 years for social sector projects.

Our Thought Processes for Social initiatives Supported by



Since 2010 we have formalized our offerings to assist organizations all across the Nation. We work with several highly reputed commercial organizations who have a proven track record during the last 15 years or more.

A brief profile of our CSR capability is highlighted in the above ten articles.

CSR: The New Game Changer

The Beginning

Finally the 1st of April has come and gone. Indian private and public companies are now covered by the new CSR provisions of the Companies Act.

I do not plan to duplicate and write about the new CSR provisions. All company Boards are already aware of the various clauses and have asked their respective Boards and CFO's to start the process of implementation.

I plan to put the entire CSR provisions directed towards the common citizen of India and what exactly does this mean for the Nation? This is best put in the words of Dr. Bhaskar Chatterjee, DG & CEO of the IICA. According to him the following will unfold.

What does it entail?

Firstly, around 16,352 companies fall within the purview of section 135. Around Rs. 20,000 crores in total will be spent by corporate each year on CSR. Around 30,000 Directors of Boards will be directly involved.

Secondly, there will be a need for a large number of CSR professionals (around 30,000 to 160,000). There will be a need to create an NGO Hub which will, inter alia, empanel credible implementing agencies. There will be a need to create a shelf of projects from which companies and implementing Agencies may choose.

Thirdly, currently there are approx. 3.3 million (33 lacs) registered NGO's in India. Probably around one million (10 lacs) fully functional and ready to face implementation challenges. Average capacity to handle per NGO about Rs. 20 lacs worth of projects per year. Hence around 100,000 NGO's will be required at the very minimum to carry forward the entire budget of Rs. 20,000 crores.

What is CSR?

1. It should be rupee measurable.
2. It must bring direct benefits to marginalized, disadvantaged, poor or deprived sections of the community.
3. CSR activities must be in the form of projects/ programs. Thus CSR activities should be project oriented. Details on the IICA website.
4. Corporate organizations are expected to fund projects from their own accounts through implementing agencies.

5. Government programs/initiatives can be complemented/supplemented.
6. Programs/projects must be within India.
7. It should be independent of compliance with any regulation or law

What is NOT CSR?

1. it does not benefit the poor & backward sections of the community it is not a CSR activity.
2. That which is not rupee measurable is not CSR activity.
3. If Pure philanthropy or mere donations will not count as CSR.
4. Funds/moneys deposited in Central or Government accounts will not count as CSR.
5. Government programs/initiates should not be duplicated.
6. Programs/projects undertaken outside India will not count as CSR.
7. Activities which are in compliance with any law or regulation will not count as CSR.
8. Activities undertaken in pursuance of normal course of business of a company, eg, pollution control, reduction in raw material or consumables, cost reduction, etc will not be CSR.

What will be the effect of this provision on the Social Fabric of India?

The total expenditure of Rs. 20,000 crores per year is a small part of the total money spent presently by the Central and State Governments on Social and other initiatives. But it will have a huge impact on the Nation. Presently a lot of Social Schemes are very poorly implemented and executed.

Private and Company initiatives will be well regulated and executed and the information will be completely transparent and in public domain. They could be used to bench mark existing Government schemes. Many reports about the well being of the people of India are presently quite hazy and incorrect. Sometimes due to Political compulsions the actual figures are suppressed and actual state of affairs are hidden from public glare and scrutiny. This veil of secrecy would be lifted with bench marking and public awareness of the best practices.

In conclusion I feel that this new provision of CSR will be a game changer.

What has **Krishan Khanna** achieved, after entering the **Social Sector in 1993?**

1. Change-over of SSI into MSME with FICCI in 2002

In 2002, he was in the National Committees of both CII and FICCI for SSI.

He was able to interact with the then President of FICCI to understand the difference (there are 7 articles about this in our book-**Transforming INDIA**, pages 53 to 59 and 62 to 64). He took up the matter with the PM and the rest as we know is history. 94% of our work force works here (unorganized sector).

Finally the GOI was even persuaded and convinced through the Ministry of Statistics and Project Implementation to locate these MSME's this was done **for the first time in 2009-2010** census. India has 200 million MSMEs in Agriculture, Manufacturing and Services. 80% are in agriculture and 20% in manufacturing and services. *The present definition of MSME's needs to be brought in line with the existing EU definition, to make them world class.* The focus of *i Watch* is the "Unorganized Sector" and the Youth of India. We work for the Bottom 90% of the population.

2. Mapping of the MSME's in the last Census of 2009-2010

This was done by Ministry of Statistics and Project Implementation. 200 million MSME's were mapped. 80% in Agriculture and plantations and 20% in manufacturing and services. 94% of the work force works here!

3. Importance of Vocational Training-2005 onwards

Kindly see the enclosed notes. We were able to make a dent but not a change. Number of centres have doubled in the last 5 years from 5,250 to 12,000. NSDC, NSDA have been set up. The process has started.

4. Importance of Relevant Education & Vocational Training-To Build - IQ+SQ+EQ

Our literature, in 13 languages, website and book explain this in some detail. Present education concentrates ONLY on IQ and MARKS. Character building and value based education requires a high competence in SQ & EQ.

5. Mind Set change for Vocational Training and NOT only H&TE -1997 onwards.

Our website and book and other literature in 13 languages explains this. See Projects 1 & 2 on page

100. In a country like India we need that 80% of the youth should go for skill building and 20% for College and university education. See details at www.wakeupcall.org

6. Low Cost Educational Technology - digital class room education @ Rs. 100 per year per student since 2012.

The attached note gives some details. See Digital School education. Developed by E-Class, Mumbai. We are the technology advisers.

7. Low Cost High Tech Safe Sanitation & Drinking, Cooking, Bathing & Swimming Water for communities @ 0.10 to 1.00 paisa per litre of water since 1995.

We are only advisers and catalysts. See attached note on Mac equipments by De Nora. We also assisted in the design and launch of Solar Powered unit handling 50,000 litres of water per day. Capital cost about Rs. 2.00 lacs and operating cost about 1.00 paisa per litre. Bigger equipments handle up to 300 million litres of water per day at very low operating cost.

8. CSR & Social Business Consulting & Projects since 2010.

This is a new activity launched on the 27th of November 2010. We have been working with Prof. Mhd. Yunus since the last 5 years and have attended his last 4 Global Summits on Social Business. Social Business is the way to go forward. Any problem of Society can become a social business. It must be sustainable and pay for itself.

9. Invited to moderate a session for VET for developing countries by the MHRD and the Economic Times in South Korea in 2007.

Representatives from developing countries of Asia, Africa and the Middle East. Photograph on our website and inside back cover.

10. Invited to moderate a session on Skills and Employment at the ThinkEdu 2013

Organized by Prabhu Chawla of the New Indian express at the ITC Chola, Chennai, in February 2013. Panelists were Venu Srinivasen, CMD of TVS Motors, Dilip Chinoy, MD, NSDC & Ravi Reddy, Vice Chairman, Teamlease.

CSR & Social Business Projects & Consulting

He started his business career after completing B.Tech. from IIT Kharagpur. He has nearly 32 years experience in the corporate world where he has successfully completed **15 joint ventures** and set up 2 companies on the BSE & NSE. His CV is mentioned in the inner cover. Details about our implementation Partners/Team can be furnished on request.

In 1992 he moved over to the Social Sector. See us at www.wakeupcall.org. We work in the areas of **Education, Educational Technologies, Sanitation, Drinking Water, Governance, Employment and Skill Building**. We are an approved charity with 80G and FCRA approvals with benefits for donors. Our Auditors are Sharp & Tannan. They can Certify and Audit project expenditure and progress for our customers.

With more than two decades of insight in the **Social Domain** we are in a position to offer following services. We tend to work Pan-India as all our literature is already in 12 Indian languages and English.

1. CSR & Social Business Consultancy:

1. Being your CSR consultant
2. Finalizing your CSR budgets/projects/details with your Team
3. Identifying suitable Projects for maximum benefit to Civil Society
4. Monitoring the Projects during implementation
5. Evaluating the final advantages after implementation

6. Final preparation of CSRRF as per Ministry of Company Affairs, guidelines

2. Suggested CSR & Social Business Projects:

We also facilitate **CSR & Social Business Projects** with leading edge Partners in the areas of:-

1. Education
2. Educational Technologies
3. Vocational Training & Employment
4. Safe Drinking, Cooking, Bathing & Swimming Water @ 1 paisa per liter for communities
5. Sanitation solutions for Agriculture, Food Processing, Commercial & residential structures.
6. Bio-Tech Solutions for Sewage Treatment Plants or STP.
7. Bio-Tech Solutions for Effluent Treatment Plants or ETP.
8. Bio-Tech Solutions for Solid Waste Management or SWM.

We look forward to working with you as a CSR Turn-Key Consultant for an end to end solution for your CSR initiatives. Our wide experience in the corporate world as well as the Social Sector is an added advantage. We work for a fixed fee as a percentage of the CSR Project size.

We welcome your queries to satisfy any questions your CEO and Board may have and look forward to a long lasting working arrangement.

Contact i Watch **CSR A-Team**. See page 105.

CSR Projects from *i Watch*

1. Mindset Change and Offering Solutions to the Youth and the Unemployed –Distribution of our 136 page book – **Transforming INDIA** to Civil Society. Impact of implementing this Project:-

- Importance of Human Resource Development, i.e., Pre-Primary, Primary & Secondary education for all
- Importance of Vocational Education & Training for Employment Generation
- Need for Complete Deregulation for Higher, Medical and Technical Education
- Importance of **MSME's** or micro small medium enterprises
- Importance of **Exports for Quality, Cost and Competitiveness**
- Importance and need for **Good Governance** to remove corruption and improve Quality of Life of the ordinary Citizen of India.

2. Employment Generation - Skills Development & Vocational Training

Can help, assist and direct setting up Vocational Education & Training Centres in your Block/District/ State for Employment Generation in areas of **Services, Manufacturing & Agriculture**. We are tied up with local training companies as well as with Germany and Swiss Skill development organization. These International Courses can be available for Indian users.

3. Digital School Education @ Rs. 100 per Year per Student or US\$ 2 per year per student.

E-Class Education System Ltd has low cost high-tech technology called E-Class where schools can be covered with digital content costing about **Rs. 100 per child per year. No computers or internet required only TV's** are good enough. Entire State board curriculum from 1st std to 10th is covered.

4. Enterprise Skills Development, ESD or Coaching in Entrepreneurship for Individuals, schools, colleges and for MSME's

Whether you are self employed or your work for others this quality is very important. **Nearly 58% of all Indians are self-employed.**

5. Sanitation & Community based Safe Drinking, Cooking, Bathing and Swimming

Water @ 1 paisa per litre for Rural & Urban India. Used for Sanitization and Disinfection.

Cheapest green technology using only common salt and power as raw materials. For 1 million litres of Safe Water only 10 KW power and 5 kgs of salt are required. **Solar powered units are also available**, as many parts of the country do not have reliable power. More than 1300 installations are already running from Kashmir to Kanyakumari. **80% of all diseases are water borne.** Bottled water costs 2000 times more than sanitized community water. **100 crore people of India get unsafe water.**

6. Why RWH or Rain Water Harvesting must be done

In India most of the water is direct or indirect rain water. The monsoon fall is very definite, about 100 days per year. 50% of water falls in 35 days and the balance in 65 days. Hence Rain Water Harvesting is a must. This is a low technology solution and needs to be practiced in all the 9,000 municipalities and 630,000 villages of India. Presently we are depleting our ground water resources. **We need to recharge them during these 100 days of rainfall by RWH.**

7. Bio Technology for recycling waste water for STP & ETP

Recycling waste water is extremely sustainable if managed in a decentralized fashion, since the source and user would be in close proximity. Transporting waste water to a remote unit for treatment and back to the user necessitates huge expenditure by way of pipelines, pumps, electricity and maintenance. The current style of recycling water is predominantly designed in this manner, and understandably, not producing much result. More importantly, inorganic treatment of primarily organic waste is destroying the organic wealth in sewage. It is vital to deploy bio-technology for recycling waste, and returning to nature what originated from her. Only then will it be possible to sustain the solution of the endemic problem of water shortage.

8. Bio technology for Solid Waste Management

Conversion of Organic Solid Waste into manure for Agriculture & Gardening.

Contact *i Watch* **CSR A-Team**. See page 105.

i Watch Projects planned

PROJECT No.1

Creating Awareness

Publication in 12 Indian languages

Publishing of 1,000 copies of our 142-page book will require about Rs. 2.99 Lac per language (this includes cost of translation, art work, paper and printing in each language).

The book contains 80 articles / Notes in the areas of

1. **Employment Generation**
2. **Education & HRD**
3. **Economy & Enterprise**
4. **Governance**

Impact of implementing Project No.1

Only 8% Indians understand English.

If we have to reach the people of India, it will be necessary to communicate with the bottom 92% of the population first and not only with the top 8% which is the 'creamy layer'.

The translated publications into 12 Indian languages viz., Hindi, Urdu, Tamil, Telugu, Malayalam, Kannada, Gujarati, Marathi, Assamese, Oriya, Bengali and Punjabi can then be used for **communicating with the majority 92% of civil society**.

We have learned that each book handed out, is then passed on to more than 10 other people and is also kept as a reference document in most cases.

PROJECT No.2

Mindset change and offering solutions

Our plan is to reach out to the teachers in schools and colleges, public libraries, local and regional media and students and parents of 40,000 colleges and 2,25,000 higher secondary schools across India.

Conducting interactive workshops within schools and colleges of India, using our publications as reference materials and as guides.

India has 1,700,000 primary schools, 2,25,000 higher secondary schools and 37,000 colleges; we need to reach out to the youth in these locations as well as the teachers. 10 to 100 books per school/college library.

Impact of implementing Project No.2

1. Importance of **Human Resource Development**, i.e., Primary & Secondary education for all.
2. Importance of **Vocational Education & Training** for Employment Generation.
3. Need for complete **deregulation of Higher, Medical and Technical Education**.

4. Importance of **MSME's** or micro small medium enterprises
5. Importance of **Exports** for Quality, Cost and Competitiveness
6. Importance and need of **Good Governance** to remove corruption and improve quality of life of the ordinary citizen of India

India has nearly 44 million unemployed registered with the employment exchanges. **Most of them are unskilled and therefore not employable! The present drop-out rate from KG to 10+2 is nearly 88%.**

The central and state governments have no plans as to how this 90% of human capital is to be gainfully employed and used for Nation Building.

The requirement of high percentage pass marks in the present educational system further aggravates the situation.

A large number of this young human capital who have functional literacy of up to class 5th and 6th and up to class 10, 11 and 12, can be very gainfully upgraded to skilled manpower, provided we had 500,000 vocational institutes, like China, where 80 million people are trained every year in 3000 vocations.

The average age of an Indian is 26 years. If India has to reap the **demographic dividend** then it would be necessary to 'skill' our youth as soon as possible.

In most countries nearly 70% to 96% of the workforce is 'skilled'. In India it is estimated to be hardly 3% to 5% in some of the better states. If India Inc. has to be globally competitive, it needs to **increase the productivity of its work force by skill building**.

Our present labour productivity is very low even compared to the developing countries of Asia, Africa and Latin America. Wages and salaries of the workforce in India are going up very fast, in multiples of our real inflation.

This is a dangerous trend as it can make India a poor destination for investment both by domestic as well as foreign business.

India can only take advantage of it's PPP (purchasing power parity) if we produce highly skilled man power in different skills for the domestic and international markets. Nearly 98% of those crossing the 10+2 stage opt for college, mostly B.A. about 71%, followed by B.Sc. and B.Com about 18%.

We have the so called '**educated unemployed**' who are really **unemployable!**

Our publications are designed to change the mindset of the youth, civil society and teachers as well as employers who need to give importance to skills rather than only to mark sheets!

Skills & Vocational Courses VET

from i Watch

This information is subject to the following:-

1. The end user will need to provide the physical infrastructure
2. The end user will arrange to collect the unemployed youth to attend these courses.
3. We will arrange for at least 50% trainees to get jobs after the course is completed.
4. There may be other hidden costs which will only come out once we discuss in detail with your team.
5. All our courses are NCVT (National Council for Vocational Training—Ministry of Labour) & SSC (Sector Skill Council-under National Skill Development Authority) accredited.
6. These courses are 240 hours (3 month duration). Fee for all the courses can vary from Rs 25,000 (twenty five thousand only) to Rs. 30,000 (thirty thousand only)
7. The actual costs depend upon the physical location, number of batches per year, number of students per year, etc.
8. The Certification fee charged for these courses are Rs 800 (eight hundred only) by the certifying agencies.
9. Any other issues will be finalized and discussed at the time before the actual Skills programs start.
10. We can have a detailed meeting in the office of the end user to decide about the above issues.

I. TELECOM SECTOR

- 1-Distributor Sales Representative(DSR)
- 2-In store Promoter.
- 3-SE- Broadband
- 4-SE-Prepaid
- 5-Tower Technician
- 6-TSM-Broadband

7-TSM-Prepaid

8-installation Engineer –DTH

9-Customer care executive-Relationship Centre

10-Optical fibre technician

2. HEALTHCARE Sector

1-General Duty Assistant

2-GDA-Supervisor

3-Geriatric Care

4-Houskeeping Assistant

5-Health educator

3. Automobile

1-Sales Representative

2-Sales Officer (Auto Components)

3-Sales Consultant –Retail

4. BPO

1-Domestic Call Center – Voice

2-Domestic Call Center - Non –Voice

5. Unorganized

1- Security Guard-domestic

2- Security Guard-Industrial

5. New Courses from Germany & Switzerland

Kindly see pages 139 & 140 where we have signed MOU's with IB, Germany & FiBL, Switzerland. Additional 300 course will now be available in Agriculture, Manufacturing & Services.

Contact:

i Watch **CSR Projects A-Team**

krishan@vsnl.com

+919821140756

Digital School Education



Digital School Education @ Rs. 100 per Year per Student or US\$ 2 per year per student.

E-Class Education System Ltd is a wholly owned subsidiary of BSE and NSE listed company Sundaram Multi Pap Ltd. Sundaram Multi Pap is the market leader in the field of paper stationery products since 27 years. At E-Class Education System Ltd we have developed educational products, high-end educational content and online learning systems.

Today the world is growing at the speed of light, new innovations and developments are taking place all around the globe. Every country wants to be a part of this change and wants to innovate and establish something to become a super power nation.

India can also be the next super power, but HOW do we achieve this is the million dollar question? We believe EDUCATION is the key to success. With proper education at each level we can ensure that our young student force can drive this country to the next level and help it become a super power.

With this aim in mind we have developed our educational product Eclass. It is a unique Audio-Visual learning concept for students of Maharashtra State Board. We have created educational content for over 600 hours for standards I to 10th in English and Marathi language. We deliver it on both offline and online platforms.

In a country like India where internet is a hassle even in metros like Mumbai one cannot imagine having the luxury of computers in the small towns which cover more than 60% of the country. But yes majority households of India have a television. The educational content we deliver not only works on computers but also on television set. This way the entire population with television can take the advantage of our product and help achieve more knowledge.

Today there are more than 3,50,000 students studying in over 600 schools that teach with the help of Eclass. Over 1,000 coaching classes and 10,000 end users (students and parents) are benefitting with Eclass.

Vision

To provide equivalent education to all and bring social equality and economic growth.



Eclass at Urban School



Eclass at Rural School

Contact i Watch **CSR A-Team.** See page 105.

Swatch Bharat

Sewage / Effluent Treatment using Bio-Tech

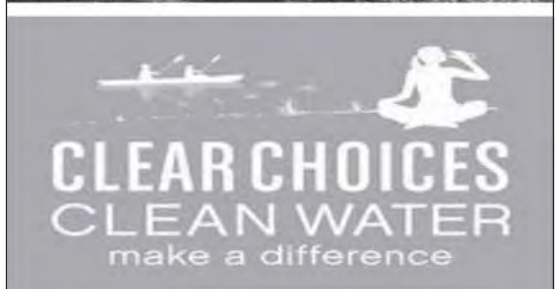
Benefits of Bio-Tech

1. Increases Ambient Oxygen
2. Reduces Carbon dioxide
3. No Mechanical Components
4. Zero maintenance
5. No Consumables Required
6. Hard Water Softened
7. Scaling Prevented
8. One-time Investment
9. No Recurring Costs
10. Presently treating 510 MLD Sewage in STP's. More locations in the pipeline

Convert Sewage/Effluent



Frederick Torns



Garbage Conversion into Manure using Bio-Tech

Benefits of Bio-Tech

1. Works Without Electricity
2. Inhibits Virus & Pathogens
3. Bio-Rich output
4. Nitrates Remediated
5. Heavy Metals Remediated
6. No Odor
7. No Sludge
8. No Emission
9. Low Capital Cost
10. Low Operating Cost
11. Environment Friendly
12. Presently Treating 810 TPD

Waste to Manure



Safe Drinking, Cooking, Bathing & Swimming Water & Sanitation for Communities

Importance of Water

1. **80% of diseases** are water borne
2. **1000 million** people in India get **unsafe water**
3. **Bottled Water** is 2000 times more expensive than community based treated and processed water
4. **Cooking, Bathing and Swimming water** is also sanitized to remove bacteria and viruses
5. **Community** based

Electro-chlorination by De Nora

1. **Operating cost** as low as **0.10 np** per litre of water
2. Only 5kgs salt and 10Kw of electrical power is required for 1 million litres water
3. More than **1300 locations** already operating in India
4. **Capacity** from 50K litres to 300 million litres per day
5. This Process is used both for **Water Sanitization** and **General Sanitation**

Approval from Customers

1. Approved user by UN
2. Approved user by WHO
3. Approval user by 8 State Government
4. Recommended by Ministry of Drinking Water & Sanitation
5. Approved user by Indian Railways
6. Approved user by Defense Establishments



Partial List of Existing Users

1. PHED installations 661
2. Indian Railways 464
3. PSU's 57
4. Private Organizations 78
5. Military Engineering Services or MES 28
6. Schools 13
7. Hospitals 6
8. Swimming pools 7
9. Village Panchayats 52



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SHARP & TANNAN (GOA)
Chartered Accountants

8th May, 2014

The Managing Trustee
i Watch
211, Olympus
Altamount Road
Mumbai 400 026

Dear Krishan,

In appreciation

We have completed the audit of your Trust for the following three years:

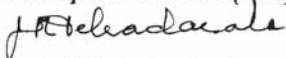
- *FY 2011-12*
- *FY 2012-13*
- *FY 2013-14*

At the outset I have to complement the Trustees for putting in, not only their time and labour in furthering the very worthwhile causes, which would go a long way in "transforming India" as the objectives of the Trust suggest, but also in permitting the use of your private apartments located at Altamount Road, Mumbai, and Greater Kailash 1, New Delhi, without any charge to the Trust.

I have also noticed that several expenses incurred on the activities of the Trust, such as travelling, communications and general expenses, are borne by the Trustees personally and not charged to the Trust.

In this regard, I would like you to convey my deep appreciation and warm sentiments to your board of Trustees.

Yours sincerely,
For Sharp and Tannan (Goa)


Jamshed K. Delvadavala
Partner

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website : www.sharp-tannan.com

Jamshed K. Delvadavala Shreedhar Kunte Milind Phadke Darryl Frank Edwin Augustine

Associate Offices at : Mumbai • Bangalore • Hyderabad • Chennai • New Delhi • Pune • Baroda

Section-8

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**A book by Dr. Rudolf Strahm, Bern, Switzerland.
It proves beyond doubt that the source of richness
of the Swiss people is the high quality of vocational
education and training of it's work force*

About *i Watch*

What is *i Watch* ?

i Watch, is a citizens movement for Transforming INDIA. 'i' means India, Indians, you and me. 'Watch,' means that we are 'watching' what is happening in the country and reporting to the citizens in order to create awareness for the sake of improvement.

The 'i' is small since our gurus have always taught us that only with humility can we perceive the truth. We focus on **Human resource development, governance, economy, enterprise and employment generation** and the relevance of their interconnection.

i Watch is a registered charity with the head office located in Mumbai, India.

Donations to *i Watch*, qualify for 80G income tax benefits for indian organizations and citizens.

The FCRA approval for foreign donations has been received in January 2009.

How do we plan to transform INDIA?

i Watch, functions in three stages.

1. **Create awareness** Publications such as *Making INDIA a Knowledge Economy*, *The INDIA you may not Know* and *Action Plan for INDIA* are used for the purpose of creating awareness.
2. **Solutions and Action Plans.** This is achieved by our website, interactive workshops and our 136 page book, *Transforming INDIA*.

3. **Actual Implementation** For this purpose, we assist and network with government, public, private organizations and NGO's.

What has *i Watch* achieved ?

In 1992, when we started on the journey of Transforming INDIA, we had no clue as to the focus we should take. We only worked on 'Good Governance' at the beginning.

It took us nearly 4 years of research and travel to come to some basic conclusions as to the areas of focus for transforming India.

This we achieved by 1996. Real work started in 1997. The focus finally watered down to the following four key areas:-

1. **HRD, Vocational education and Employment Generation**
2. **Governance & administration** of India
3. **Policy changes** regarding, SSI, MSME, Tax, Corruption, Labour Laws and Skills
4. **Economy, Enterprise**, eg. emphasis on exports and other sectors of the economy such as retail, wholesale, manufacturing, travel and tourism, healthcare, infrastructure and agriculture.

i Watch has had some success in all four areas as we have been able to change the mindset of a large cross section of the decision making population by the use of:-

The only
constant in life
is change

1. Interactive workshops, seminars & articles
2. Publications, *Making INDIA a Knowledge Economy*, *The INDIA you may not know* and *Action Plan for INDIA*
3. 144 page book, *Transforming INDIA*
4. Website at www.wakeupcall.org
5. Participation in the National Committees of the MHRD, Planning Commission, Chambers of Commerce, CII, FICCI, Ministry of IT, etc.

As member's of CII, FICCI, ASSOCHAM, PHDCC&I, IMC, MEDC, BCC&I and discussions with IBA, RBI, and MOF we were able to influence the meaning of **MSME's** and understanding the limited relevance of **SSI's**.

Recognized by the European Union, **EU**, for a joint project on employment generation and vocational education and training in ten states of India.

In the area of Governance we have been consulted by state governments such as the Delhi NCT to suggest and advice on **Governance and Administration**.

In **Educational Reforms**, our thought process regarding vocational education and training, have been considered by the Ministry of HRD, Planning Commission & IGNOU.

Thrust on **Deregulation of Higher and Technical Education** is gaining acceptance through initiatives with the CII, FICCI, ASSOCHAM, EPSI, PHDCC&I and others.

In the areas of **Economy & Enterprise**, we are called for our feedback and inputs by think tanks such as the **World Economic Forum, WEF**.

Since 2015 we have been invited to the National Board of the **Ministry of MSME** and the **National Council of CII on MSME**. Our reconsiderations for change have been accepted

In the last 23 years we have distributed more than 700,000 copies of our book, **Transforming INDIA**, conducted a large number of interactive seminars and hosted all our ideas and thoughts on our website.

Our publications are available in 13 languages, in English, Hindi, Gujarati, Marathi, Bengali, Assamese, Oriya, Tamil, Telugu, Kannada, Punjabi, Urdu and Malayalam. Only 8% of Indians understand English.

i Watch principles, mission, goals

Guiding Principles

1. **Positive attitude**
Believe that real change is possible.
2. **Research**
Don't hit the road without detailed home work.
3. **Effective communication**
Use communication tools to reach out to all.
4. **Belief in the power of the community**
Recognize that the central means of all actions is a collective assertion. From an inclusive community comes a collective strength.
5. **Constructive engagement**
Engage in the spirit of partnership. Build alternative modules or change the rules.
6. **Non partisan culture**
No political affiliation
7. **Pro-political approach**
Politicians are victims of the vicious cycle, not villains
8. **Respect for political process**
Recognition that the politics is the central to democrac and the true politics is a noble endeavour
9. **Political alternatives**
There is no alternative to democracy—the alternative to democracy is a better democracy
10. **Professionalism**
Deliver on individual roles and responsibilities at the highest degree of commitment and capability at all times.

Historical Background

The focus was always constant in the areas of **Human resource development, governance** and the **economy**.

The importance of the interdependence of **HRD-Governance-Leadership-Economy & Enterprise-Infrastructure** on each other needs to be understood. Each depends upon the other in many ways. It is not possible to look at them seperately without causing harm and lowering the efficiency of the country.

Mission

To create awareness for the citizens of India in areas which are vital for the future of the nation,

namely **good governance & effective administration**, how it influences the economy and how to achieve it?

The importance of relevant **Human Resource Development**. Removing the present 'Licence Raj' in education!

The need for **policy changes** such as scrapping the existing limited definition of small scale industry, **SSI's**, and expanding it into micro, small and medium enterprises or **MSME's**.

The crying need of **relevant labour and administrative** reforms to bring India at par with other Asian Tigers and to provide a level playing field to our business leaders and managers.

Why **exports and tourism** must be expanded by 1000% of the present levels!

In a democracy people have to get involved. Change is possible and more creditable if communication is 'bottom up' rather than 'top down'. Our presentation is therefore designed for the common man or the 'citizen of India'.

Goal

To make India, a land, which is truly world class. With 1,225 million people, **India has a very large demand, but where is the buying power?**

We must export more to build up buying power!

India's future lies in becoming a resource base for the world, in manufacturing, trading and services, **since 97.4% of world trade and 97.8% of world buying power is NOT within India.**

A bird's eye view shows:-

- India needs to emulate the successful examples of **information technology, software** and **diamond exports**, for all other sectors of the economy.
- With a high purchasing power parity (PPP of Rs.16 = US\$1), India has immense scope to export goods and services. Good governance and effective administration are necessary to achieve these goals for India!
- Politicians and officials in China '**Talk Economics & Walk the Talk**', that is why non-resident Chinese and foreign investors have confidence in China! Fortunately, the preception about India is now in positive territory!

What can we do for you?

Dear Reader we can assist and help you in the following areas:-

1. Publications

Starting with this book. Please see details of other **list of publications** as detailed out on page 116. We request you to look at the outside cover page to note that this book of 128 pages is also available in **12 Indian languages** such as Hindi, Urdu, Punjabi, Assamese, Bengali, Oriya, Gujarati, Marathi, Tamil, Telugu, Kannada & Malayalam. English is only understood by 8% of the Indian population.

2. Interactive Workshops

We conduct interactive workshops in the following topics as detailed on page 100. 'Relevant **Manufacturing Policy** for India', 'Relevant **Educational Policy** for India', '**Globalization** and how India can grow at +10% per year', '**Good Governance** and how it benefits the citizen', '**Employment Generation** for 10 million people per year', 'How to make Money after leaving College', '**Transforming India** through Education'.

3. Mind-Set-Change of teachers, Parents and the Youth

Kindly see the projects 1 and 2 as detailed on page 100 Not only are the Projects described but the positive impact of these Projects are also explained in detail.

4. Providing Relevant Data

Kindly refer to our website at www.wakeupcall.org,

all our publications as mentioned under item 1, list of references as detailed out on page 113 and you will see that we have extracted a lot of relevant data for you the reader and formatted the same for easy reading and understanding. All our data is updated, as far as possible, once a year.

5. Setting up Vocational Education and Training Centres

We work with a few large organizations within India who collectively train large number of people per year. We are their **knowledge partners**. By use of technology, by use of actual training centres, by use of integrating such training centres with business and industry in each local area, by providing trained Trainers & Mentors' for actual training, by conducting assessments, exams and certification of trained persons, by providing counseling before training and placements after training, we add a lot of value for the youth in any geography or district of India. Currently we are concentrating on VET courses in the areas of Healthcare, Hospitality, Telecom, Retail and Security, Turnkey VET starting from selection to placement. Details on request.

6. CSR Projects

In the area of school education, skills, drinking water, STP, ETP, RWH and solid waste management. See pages 95 to 106 for details.

General information

Founders of *i Watch*

Please see www.wakeupcall.org

Hon. Advisors of *i Watch*

Please see www.wakeupcall.org

Funding of *i Watch* activities

Funding, on account of Infrastructure, Capital and Revenue expenses has been provided by the founder Krishan Khanna and his family.

How to become a Member

It's very simple and easy, just send an email to krishan@wakeupcall.org, giving your background and why you wish to become our member.

The only requirement is that you should be an Indian Citizen, NRI or PIO.

Please duplicate and magnify the efforts of our NGO!

Kindly see the short articles inside this book, for reference and details.

Networking with other NGO's

We would like to network and magnify the efforts of other NGO's and Think Tanks who are working in India on issues similar to those of *i Watch*.

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We welcome your help & creating awareness within INDIA

- Your time and effort
- Your networking within and outside India

Interactive Workshops

We conduct interactive workshops on:-

1. Relevant **Manufacturing** Policy for India.
2. Relevant **Educational** Policy for India.
3. **Globalization** and how INDIA can grow at +10% per year rate of growth.
4. **Good governance** & how it benefits the citizens.
5. **Employment Generation** of 10 million per year.
6. **How to make Money** after leaving college?
7. **Transforming INDIA** through education.

Minimum time required is about 90 to 120 minutes.

We recommend interactive sessions of 180 minutes.

Contact details

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Registration with Charity Commissioner

i Watch is a registered charity, registered with the charity commissioner in Mumbai, Maharashtra, India. File No. 3130 of 18th of May 2001. Registration No. E-21498 dated 29 January, 2004.

Income tax exemption, under section 80G is available and valid. This allows 50% tax deduction for all donations to *i Watch*.

FCRA approval No. 0837201222 for foreign donations, approvals received on 13-01-2009 as per Ministry of Home Affairs letter, for projects under economic, educational and social sectors.

References

Sources for Information and Data

- World Fact Book - CIA
- World Development Indicators, Published by the World Bank www.worldbank.org
- UNIDO publications - www.unido.org
- OECD publications - www.oecd.org
- UNESCO publications - www.unesco.org
- UNDP publications - www.undp.org
- Centre for Civil Society, New Delhi - www.ccsindia.org
- Janaagraha Foundation, Bangalore - www.janaagraha.org
- Indian NGOs.com - www.indianngos.org
- DEIS, Pune - www.deispune.org
- Educational promotion Society of India - www.epsfi.org
- School Choice, New Delhi - www.schoolchoice.org
- Statistical Outline of India - 2013-2014, Published by the Tata Services Ltd.
- Business Today, dated 28 April, 2002. A large number of issues between 1996 to 2015
- Business World, dated 10 June, 2002. A large number of issues between 1997 to 2015
- Business India, dated 22 July 2002. A large number of issues between 1996 to 2015
- The Economic Times, The Financial Express, MINT Business Standard & Business Line Various articles on the Chinese and Indian Economy, and comparisons with each other
- India Today. A large number of issues between 1996 to 2015
- Dawn of a New Vibrant India- May 2015 by Dr. Harbeen Arora & Dr. Vinay Rai

Suggested Reading about CHINA

- Books about China, printed by the Foreign Languages Press, Beijing. Website: www.flp.com.cn
- The Chinese Economy into the 21st Century - Forecasts and Policies, by Li Jingwen.
- Reforming China's State-Owned Enterprises, by Gao Shangquan & Chi Fulin
- China's Economic reform at the turn of the Century, by Chi Fulin
- Investing in China: Questions & Answers by Pan Zhilong & Pan Chi
- China Daily, Beijing Edition Newspaper

Krishan Khanna in National Committees from 2002. In the areas of MSMEs, Education, Vocational Training & Skills

1. **CII** - National Committee on SSI – Expert Member
Labour, New Delhi – Invitee
2. **FICCI** – National Committee on SSI – Expert Member
3. **Prime Minister's Task Force** – Expert Member
- Skills Development & Employment Generation for the Nation, Planning Commission, New Delhi
4. **Planning Commission**, New Delhi – Member
- 11th Plan working Group on Secondary Education & Vocational Education
5. **Ministry of HRD**, New Delhi – Member - 11th Plan working Group on Secondary Education & Vocational Education
6. **IGNOU**, Min of HRD, New Delhi – Member - 11th Plan Working Group on distance education
7. **AICTE**, All India Council for Technical Education, Min. of HRD, New Delhi - Member of the Governing Board (AIB – VE)
8. **PHDCC&I**, New Delhi - Co-Chairman – Expert Committee on Education & Industry
9. **PANIIT – 'IIT's for ITI's'** Advisor VET, program modernizing existing 5114 ITI's in India
10. **CII** - Member National Committee on Education
11. **CII** - Member National Committee on VET & Skills
12. **CII** - Task Force on Vocational Education and Training – Chairman for 2007 to 2008
13. **FICCI**, New Delhi - Member National Committee on Education
14. **ASSOCHAM**, New Delhi – Co-Chairman Expert Committee on Education
15. **EPSI**, Educational Promotion Society of India, New Delhi – Chairman - Vocational Education & Training Expert Committee
16. **Parliamentary Committee** on Industry and
17. **Rotary International**, Rotary District 3140, Bombay Mid Town, Bombay, Director – Career Guidance & Vocational Training
18. **Times Foundation**, New Delhi - Hon. Advisor – Vocational Education & Training
19. **National Knowledge Commission, NKC**, New Delhi. Informal exchange of notes and thought process
20. **Ministry of Labour & Employment**, New Delhi. Special Invitee regarding Labour Reforms
21. **Prime Minister's Secretariat**, New Delhi. Informal exchange of notes and thought process
22. **National Manufacturing Competitiveness Council, NMCC**, New Delhi. Informal exchange of notes and thought process
23. **National Institute for Open Schooling, NIOS**, New Delhi. Informal exchange of notes and thought process
24. **Ministry of IT & Communications**, New Delhi – Member Expert Committee on e-Learning & e-Infrastructure
25. **Education World**, Bangalore. Member Advisory Board
26. **Ministry of HRD & ET-Korea**, Seoul – Chairman Panel for Skills for Developing countries
27. **EU centre for Vocational Training, Thessaloniki, Greece**-Special Invite for Annual Events
28. **ThinkEdu 2013 – New Indian Express**, Chairman-Session on Vocational Education & Training
29. **Ministry of MSME** - National Board Member
30. **CII** - National MSME Council

Abbreviations used in this book

GOI	Government of India	VRS	Voluntary retirement scheme
MOF	Ministry of Finance	SQ	Spiritual Quotient
RBI	Reserve Bank of India	EQ	Emotional Quotient
WB	World Bank	IQ	Intelligence Quotient
FDI	Foreign Direct Investment	PPP	Purchasing Power Parity
SSI	Small Scale Industry	MP	Member of Parliament
SME	Small Medium Enterprise	MLA	Member Legislative Assembly
NGO	Non-Government Organization	CRORES	Indian measure of value, 1 crore 1,00,00,000
NRI	Non Resident Indian	CII	Confederation of Indian Industries
NRC	Non Resident Chinese	FICCI	Federation of Indian Chambers of Commerce
PIO	Person of Indian Origin	IMC	Indian Merchant's Chamber
Rs.	Indian rupees	MEDC	Maharashtra Economic Development Corporation
LACS	Indian measure of value, 1 lac = 1,00,000	BCC&I	Bombay Chamber of Commerce & Industry
GDP	Gross Domestic Product	AICTE	All India Council for Technical Education
MHRD	Ministry of Human Resource Development	UGC	University Grants Commission
H&TE	Higher & Technical Education	ASSOCHAM	Associated Chambers of Commerce
VET	Vocational Education & Training	PHDCC&I	PHD Chamber of Commerce & Industry
ESD	Enterprise Skills Education		
P&SE	Primary & secondary education		
SEZ	Special Economic Zone		

i Watch publications available in 13 languages

The book, "**Transforming INDIA** through Relevant Education and vocational Training" is available in English, Hindi, Urdu, Marathi, Gujarati, Bengali, Oriya, Assamese, Punjabi, Tamil, Telugu, Kannada and Malayalam.

English is only understood by 8% of Indians and therefore it is necessary to communicate in all major languages of India. It is therefore essential to offer our publications in all 13 languages.

Administration and mailing charges Rs. 400 per copy in India. All payments in advance by Cash / cheque in favour of *i Watch*.

For language editions of the book, a minimum print run of 1000 copies requires a donation of Rs. 300,000 per print in any Indian language for free delivery within India. to take care all administration and other costs. See page 100 for other details.

Other publications of *i Watch*

i Watch also publishes nine other major publications as mentioned below, in 13 languages, out of which 12 are indian languages, as mentioned above.

Free samples may be downloaded from our site at www.wakeupcall.org.

These are 2-page publications and are:

- 1. Making INDIA a Knowledge Economy**
..... on Education & HRD
- 2. The INDIA you may not know**
..... on Economy & Employment
- 3. One Point Action Plan for INDIA**
..... on Good Governance
- 4. Unshakle & Unchain Saraswati - the Goddess of Learning**
..... on Higher & Tech. Edu
- 5. *i Watch*...Transforming INDIA**
..... brief description of *i Watch* activities

6. The Importance of Education

..... Holistic Education & HRD

7. Transforming India through Education

..... banchmarking India for Excellence

8. Paradox INDIA

.....what Education Institution's need to do

9. Relevant Education & Training

.....what Business & 100 Industry need to do

The above nine notes are in two pages, printed in 4-colours on heavy 120 gsm art paper, in size 8.5" x 11". The minimum print run is 4,000 copies per publication per language.

Donations of Rs. 16,000 would cover processing and administration costs for 4,000 copies for each 2-page, single sheet, of any of the above, for free delivery within India for any of the above nine publications.

Individuals as well as organizations who wish to avail of Income Tax benefits as per 80G, may kindly mark local cheques and demand drafts payable at Mumbai in the name of *i Watch*, and send to the address below or directly into our bank account as per details below:

i Watch
211, Olympus
Altamount Road
Mumbai 400 026 / India

For payment by NEFT/RTGS
i Watch, account No. 006610110001300
Bank of India, Altamont Road Branch,
Mumbai-400 026.
IFSC Code: BKID0000066

Why are the SWISS so Rich?

A book by Dr. Rudolf Strahm

This book clearly proves that the main reason for the economic success of Switzerland is because of the highest quality of **Vocational Education and Training**.

Focus on **Vocational Training & Skills** missing in India. Hardly **3% to 5% of our work force** is formally skilled. In S.Korea it is about **96%**. In Japan, USA and the EU it is about **60% to 90%**. The main purpose of this portion of the book is to focus on the importance of **Vocational Training & Skills**.

We are pleased to inform you about Dr. Strahm's (from Switzerland) book on the importance of **Vocational Training**. This book really celebrates the **German Dual System**. The original version of this book in German - "**Warum wir so reich sind**" is in 350 pages. It means "Why are we so Rich?".

This book also reinforces the work being done by *i Watch* in India since the last 22 years. We concentrate on empowering our people by **relevant education and vocational training**.

i Watch has the rights to publish this and modify as well as translate into 22 Indian languages. Hardly 8% of Indians understand English.

Dr. Strahm has now brought out a new edition in 2014... same theme... but changing the... heading to make it MORE HARD HITTING...." **Only University Education** could be a Dead End to Growth and Prosperity"... (or concentrate on **Relevant Education and Vocational Training for Real Growth and Prosperity**).

India has 40,000 colleges but only 12,000 VET centres (ITI & ITC). Switzerland has 6,000 VET centres (for 8 million people), Germany has 100,000 VET centres (for 82 million people), Japan has 150,000 VET centres (for 129 million people) and China has 500,000 VET centres (for 1342 million people), 70% VET centres are in Rural China to upgrade and skills of the rural population.

Soft copy of this book can be freely downloaded from our home page. For hard copies kindly remit to "*i Watch*". 211, Olympus, Altamont Road, Mumbai 400026, a sum of Rs. 500 to cover admin costs.

Switzerland has 6,000
VET centres for 8m
people.

India has 19,000 VET
centres for 1225m
people!

China has 500,000 VET
centres for 1346m
people!

Shri Narendra Modi
Hon'ble Prime Minister
Government of India

10th of July 2014

"National Manufacturing *Draft* Policy"

Respected Modi Ji,

I had first written this Policy in December 2002. Not much has changed in the last twelve years in the manufacturing sector. There have been some **islands of excellence**, in manufacturing, services and agriculture too; but largely we as a country do not really figure on the **World Manufacturing Map**, in spite of our huge Potential and size.

After the new BJP/NDA government which has taken charge in May 2014 under your leadership, there seems to be a very positive change in attitude and a desire to implement policies which will benefit the people of India as far as manufacturing and other areas are concerned.

At last there is an emphasis on **Good Governance, MSME's, disinvestment of PSU's, Exports, Roads, Physical infrastructure, Airports, Railways, Waterways, Skills and Vocational Training, Labour Reforms** and effort to increase **Energy/Utility Prices** to market rates. All these changes are required to be implemented to allow world class manufacturing.

It is with this hope that I have taken the courage to reproduce my old policy report of December 2002 **where all of the above were planned**. It has been hosted on our website at www.wakeupcall.org since December 2002.

To make the old report more meaningful I urge you to use the relevant portions from our 136 page new 20th Edition book – **Transforming INDIA**. This draft Policy report covers 30 pages. It can be downloaded from our site. The **Table of Contents** gives an overview.

The highlights of this draft policy report are the following see **Table of Contents** of *Draft Policy*)

1. Ten **Assumptions**
2. Six **Policy changes** suggested
3. Nine **Constraints** to be overcome

I am a passionate mechanical engineer, with specialization in **Manufacturing Technology** from IIT-Kharagpur. I had the good fortune to transfer technology from Germany, Japan and other countries around the world in the 60's, 70's and 80's. I have also lived and worked in these countries for nearly seven years of my working career. As a past CEO of an Indo-American manufacturing company in Mumbai I was able to increase the top line by 50 times in 12 years.

Frankly speaking, I am very confident that the time has come for India to boost its manufacturing capacity multifold both for domestic as well as export markets.

It would give me great satisfaction if some of the issues mentioned in our Draft Policy would encourage the Planners and Business leaders to take some bold measures and decisions which are necessary to make India into a powerful International **Quality Manufacturing Base**.

With Regards & Respects

Krishan Khanna
Chairman & Founder

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Shri Narendra Modi

Hon'ble Prime Minister

Government of India

17th of June 2014

Use the Energy & Passion of our YOUTH To improve Village Arts & Crafts For Domestic & Export Markets

Respected Modi Ji,

I have been in business for 32 years and since the last 22 years in the Social Sector. I have been connected to Indian educational policy and the economy for the last 12 years. Kindly see attachment on Positions held since 2002.

1. India is a very old and highly diversified Nation with 22 official languages and thousands of traditional Arts & Crafts which represent our National Culture, Heritage and History. Many of these very valuable arts and crafts are part of our National Treasure and many of them are disappearing due to the neglect by previous Governments during the last 66 years.
2. All these Arts and Crafts support millions of our Artisans & Craftsmen and Craftswomen all across the 29 states of India. Many of these traditional crafts have huge potential both for the domestic as well as the Export markets.
3. There is a huge Latent Potential in nurturing and reviving these ancient crafts, as they represent the "Soul of India".
4. They are "Very Indian" and have huge potential for employment generation for millions as well as huge potential to boost the economy and well being of millions of our brothers and sisters in their present geographical locations.
5. India missed the Industrial revolution by which our people missed the development of the best practices in manufacturing, packaging, sales, sales-promotion, marketing and advertising; especially in the hinterland of our Nation where these Arts and Crafts originate. In fact the unplanned urbanization is destroying many of these ancient and very valuable traditions of our country, without understanding their importance.
6. I suggest that the youth from the existing 40,000 colleges of India should spend at least one month every year in the hinterlands of India and help improve the existing manufacturing, packaging, marketing of our Ancient Arts and Crafts. This is a win-win-win-win situation for all the stakeholders, the Artisans, the Youth, the Block and District where these crafts are located and last but not the least the State and Central Governments.
7. As a first step all the existing 40,000 colleges need to be identified with their actual geographical location and number of students.
8. As a second step we need to locate these centers of Arts and Crafts all across the Blocks, Districts and States of India.
9. The third step would be to integrate the students under item 7 with the Artisans under item
- 10 The PMO & the MHRD would be presenting to the Youth and the Nation a great opportunity for "Inclusive Growth" with all-round benefits to all the stakeholders.
11. India has 100 million Micro, Small, Medium Enterprises, in agriculture, manufacturing and service sectors, where nearly 460 million people work. The ones in the Micro and Small Enterprises will be the ones who will benefit the most. We will also be able to locate and recognize thousands of artists and craftsmen who may perish and many of our arts and crafts would be lost forever.

With Regards & Respects

Krishan Khanna

Chairman & Founder

Shri Narendra Modi

Hon'ble Prime Minister

Government of India

17th of June 2014

Please consider Deregulation & Opening-up of the Higher & Technical Education Sectors to Domestic & Foreign Educators

Respected Modi Ji,

We are a family run 22 year old NGO located in Mumbai. See us at www.wakeupcall.org. Between 1954 and 1961 I studied at BHU and then at IIT-Kgp. Worked 32 years in Business & 22 years in the Social sector. My CV is attached.

1. For nearly 66 years Indian education has been stifled.
2. World Rankings of Indian Colleges is going down every year.
3. 250,000 students leave the Shores of Bharat every year, resulting in a foreign exchange outflow of about Rs. 75,000 Crore per year; sufficient to build 60 IIM's and 40 IIT's per year!
4. The IIT's and the IIM's have an acute shortage of teaching faculty, about 40%. This is affecting quality and expansion. Present salaries and controls do not encourage innovation & research.
5. Even after 63 years IIT-Kgp has no reserves as the fees are too low; hardly Rs. 25,000 to Rs. 50,000 per student per year while the actual cost is about Rs. 250,000 per year per student. At least 5 banks would be ready to finance and give loans to these students.
6. The Government of India and the State Governments should concentrate on pre-primary, primary, secondary and vocational education and training and let the market forces take care of all forms of higher and technical education. Only competition will promote excellence and research!
7. Even after 66 years of Independence a large % of our population is still illiterate (our estimates are about 60% are illiterate and of very poor quality. The Pratham ASER reports confirm this). No inclusive growth is possible without 100% literacy and sound school education. 90% of the Human Brain is developed by the age of 6, hence pre-primary education needs to be put in place for 100% of our young brothers and sisters. A lot of funds are therefore required for this vital sector of Human Development.
8. India has only 28,000 foreign students while Australia has about 400,000, Singapore about 150,000 and even small Dubai has 50,000. India could get 5,000,000 foreign students per year provided we could offer world class education at 50% or less cost than USA, UK & Canada.
9. Teacher's salaries, appointment of the head of the Institution, type and scope of studies and curriculum and other details should be best left to the Institution. In the USA 4 people can get together and start a University. In India one has hurdles like UGC, AICTE and other arms of the MHRD. There is very little of innovation but a lot of controls. Competitive Spirit is missing!
10. We have forgotten that India got its Brand because of IT & Software. The business is completely deregulated and market driven. Good organizations grow and bad ones close down as the good people leave for better and more exciting institutions. NIIT, for example is one such example. They are officially recognized in 30 countries but not by AICTE. Other examples of Institutions not recognized in by AICTE are ISB, Hyderabad and SP Jain, Mumbai. This is a sorry state of affairs.
11. Lastly, India got its **political freedom** in 1947, its **economic freedom** in 1991. time has come for our **intellectual freedom** in 2014! The Goddess of learning, **Sarwasti Ji**, has to be unchained and unshackled.

With Regards & Respects

Krishan Khanna

Chairman & Founder

Shri Narendra Modi
Hon'ble Prime Minister
Government of India

21st of February 2015

MSME's can unleash High Growth *& be the 'Drivers' for 'Skilling INDIA' & 'Make in INDIA'*

Respected Modi Ji,

MSME's are the Dynamos of any nation, India is no exception. According to our study during the last 22 years we strongly feel that MSME's have been neglected in the past 67 years excepting during the **last NDA Government** when the term and definition of **SSI** was changed to **MSME**. If the nation has to **grow at 8% to 10% per year** we will need to **revitalize our MSME's** as suggested below. Once upon a time, **Infosys, Hero Motors, Bajaj Auto, Wipro, M&M, IBM, Microsoft, Ford and others were MSME's too.**

1. Indian Definition of MSME needs change for "Make in INDIA"

Bring the Indian MSME definition in line with the EU/Chinese definition. Allow higher number of employees & use labor intensive technologies for India. See table below. In the EU the main factors determining whether a company is an MSME are: **1. Number of employees and 2. Turnover or Balance sheet total.** There are about 25 million MSME's in the 37 EU countries. **99.8% of all enterprises in the 37 EU countries are MSME's.**

EU Company (Our Suggestions in brackets)	Number of Employees	Turnover in Euro	or	Balance sheet total in Euro
Medium-sized (OK)	< 250/(1000)	≤ € 50 m (Rs. 350 Cr)		≤ € 43 m (Rs. 300 Cr)
Small (OK)	< 50/(200)	≤ € 10 m (Rs. 70 Cr)		≤ € 10 m (Rs. 70 Cr)
Micro (OK)	< 10/(40)	≤ € 2 m (Rs. 14 Cr)		≤ € 2 m (Rs. 14 Cr)

Investment in Plant & Machinery	< As per RBI >	Investment in Service Sector Enterprises
Medium Enterprises >500 lacs & ≤1000 lacs		>200 lacs & ≤500 lacs
Small Enterprises >25 lacs & ≤ 500 lacs		>10 lacs & ≤200 lacs
Micro Enterprises ≤ 25 lacs		≤10 lacs

The present definition of **RBI is not in line** with China, ASEAN countries, EU, Russia, Brazil, S. Korea, Japan and S. Africa. (*Detailed Research Reports are priced publications available from i Watch*) India has about 200 million MSME's, 80% in Agriculture and 20% in services and manufacturing. **The present RBI definition needs change for "Make in INDIA" to succeed.** We need to correct this by taking economically correct business decisions to **make our MSME's world class and competitive with the best in the world.**

2. Catalogue our MSME's - Expand the Tax Base - Reduce the Tax rate

After 67 years of Independence hardly **6%** of India's population has PAN cards and less than **3%** of the total population actually pays tax. This needs some study and action plan so as to increase the tax base.

We need to locate Partnership & Proprietary MSME's. Presently only Private Ltd. & Public Ltd. Companies are catalogued; this is ONLY 1% of all organizations in the country. We can then **expand the tax base from 3% to 15% and reduce the Tax Rate from 30% to 15%** in the long term?

I lived and worked in the EU and most of the time in Germany for a period of nearly 4 years.

The average employment in a German company is about 20 employees. I am a very old member (since 1965) of the **IHK** (Industrie & Handels Kammer or the German Chamber of Commerce) and now the **AHK** (foreign arm of the IHK) or the Indo-German Chamber of Commerce in India. In Germany every enterprise whether it is a MSME or large organization **HAS to register** with the local branch of the IHK, otherwise they **CANNOT start operations**. They only have to mention 1.Type of Business, 2.Number of employees, 3.Total Assets or 4.Total Sales for the year and report every year. **Hence data mining is possible**. Accurate Man-Power planning is possible, as it is Bottom-Up.

As a result the **IHK** has nearly 4,000,000 members out of which nearly 99.8% are MSME's. In short, **every ENTERPRISE** whether in **Services** or in **Manufacturing** is catalogued! **99.8% are MSME's** and the balances are large companies. In fact the main purpose of the **IHK** or German Chambers of Commerce is **to promote MSME's!** Large companies can manage.

This data needs to be activated for India MSME's. In India, **propriety/partnership companies (98% of all organizations)** are not catalogued by the Ministry of Company Affairs. How can we help and assist our MSME's if we do not know who they are and where they are? We call this the **“Unorganized Sector”**. **But 93% of the work force is with MSME's**. As per the 'Business Line' dated 3rd of June 2014**, India has one of the highest number of **'Shadow Companies'**; organizations which are not registered with any government department. About 127 'Shadow Companies' for every 1 registered company. **Study conducted by the Imperial College Business Department with 68 countries.

3. Portal for MSME's for their improvement

The Ministry of MSME needs to set up a portal to assist new and existing MSME's to improve, see www.sba.gov and other MSME portals in the EU, S. Africa, ASEAN, Brazil, Japan etc.

4. MSME websites should be in Indian languages

We need to have all government information, starting with the website of the Ministry of MSME in all the 22 Indian languages. English is only understood by 8% of the Indian population.

5. Cataloguing our MSME's will also help in Skill Building & “Skilling INDIA” of our Youth & Unemployed

In Germany, for example, about 500,000 companies (99.8% are MSME's) are involved to give practical training to about **30 lac apprentices** who get practical in-house training here and theory in about 100,000 Vocational Training Centres. 95% of all apprentices are with MSME's.

In India we only have 12,000 ITI's & ITC's. In 2007 we only had 5,500 centres. So they have doubled in the last 7 years. Our **Apprentice Act** will also need to be amended accordingly to cover 10% of the work force as apprentices. Presently India has only 2.6 lac apprentices.

China has 500,000 Skill Training Centres. Out of these nearly 70% are in Rural China. It is estimated that China has nearly 600 lac apprentices at any given time. Mostly with MSME's.

6. Indian State Capitals need Convention Centers & Exhibition grounds of International quality

Germany is a classic example. After the 2nd World War, it was devastated. Every large city has these facilities, which then becomes a meeting ground for local MSME companies to exhibit their wares and services, for domestic and world markets. Dubai, Singapore and Hong Kong are following this example for many years. The spin-off is multi-fold business improvement, M&A's, tourism, joint ventures, etc. China is doing this in a big way. Excepting Hyderabad, no other state capital in India including Delhi, Mumbai, Chennai, Bangalore, Kolkata have an International Exhibition and Convention Centre. Already 67 years have passed!

With Regards & Respects

Krishan Khanna

Chairman & Founder

Shri Narendra Modi
Hon'ble Prime Minister
Government of India

1st of November 2014

Instead of a **Planning Commission** we need a *Centre for Excellence, Innovation & Improvements*

Respected Modi Ji,

1. **We thank you for scrapping the Planning Commission.**
2. Planning has to be done at the Grassroots and at the State/District/Block level. Not by 1,000 people sitting in Delhi?
3. We suggest replacing it with a **Centre for Excellence, Innovation & Improvements**
4. It should be like a **Think Tank** with world class experts who have a track record and a result oriented motivation to **Transform the Nation**, as soon as possible.
5. They should also monitor **Goal setting** as well as **Goal achievements**.
6. These experts should be on a contract for a maximum period of 5 years or less and new teams can be brought in or dissolved at any time or if the objectives have been achieved earlier.
7. These experts have to work with the Ministries, CISR labs, Educational Institutions, RBI and the State Governments and assist, educate and help them to improve.
8. If the concerned end users refuse to change then the PMO has to be informed for suitable action.
9. Agenda of this Centre should be drawn out for 5 years at a time, If the objectives are not achieved within 5 years they can be rolled over for a further period of 5 or less. Final say on the Agenda will be the PMO and the 30 States and 6 Union Territories of India.
10. **Agenda** to be decided by the PMO in consultation of the States and the Ministries. Should be relevant to what will benefit the Citizens of India and the Contry.
11. However this change does not mean that the various Ministries and Departments of the GOI will not have their own agendas and targets.
12. Here are some examples of **My Agenda** for this proposed Centre, as a Citizen of India, in random order.
Kindly see the attachment on pages 125 and 126.

With Regards & Respects

Krishan Khanna
Chairman & Founder

Replace the Planning Commission by a Centre for Excellence, Innovation & Improvements

Suggested next 5-year Agenda - My personal list(In Random Order)

1. Human Resource (Education & Skills)

1. How to achieve 100% literacy of our population?
2. Why introduction of **Pre-Primary** education is necessary and must be started ASAP?
3. How to improve Primary and Secondary school education to world class and PISA standards?
4. How to build the education system to **improve the EQ & SQ** of the youth and not only IQ?
5. How to divert 80% to 90% of the youth into Skills & Vocational Training after the age of 14
6. Presently we have 40,000 colleges and need to increase the Skill centres from 11,000 to 500,000
7. To integrate 200 million MSME's, 1.8 million schools, VET centres (about 500,000 required, presently only 12,000 ITI's and ITC's) into a workable union to train 20 million or more people per year. 65% of these centres need to be in rural areas.
8. Advantages of completely deregulating all forms of Higher & Technical education?
9. MDG Goals to be considered and surpassed.
10. Why we do not encourage other foreign languages to be taught? English speaking countries control only 29% of the World GDP. In 1993 I took a bet from a Software company in Mumbai and got an order from Germany @ US\$ 100 per hour for body shopping when the then going rate was hardly US\$10 per hour; because I knew the German language! I am not an IT expert and have zero knowledge about software programming!
11. Why don't we make India an International Hub for all forms of Higher & Technical education?
12. Why should 260,000 Indians go abroad for higher studies and drain the FX reserves by US\$ 15 billion per year, sufficient to build 90 IIM's or 45 IIT's per year?
13. I have written two letters to the PM on this subject in June 2014.

2. Exports

1. Why we need to plan for **US\$ 1000 billion** exports ASAP.
2. Germany & China export US\$1,800 billion each!
3. We all know the advantages due to exports. Improves quality and reduces cost.

3. Tourism

1. How to achieve a tourist arrival of **50 million** tourists per year?
2. Only Paris gets 67 million tourists per year!
3. We all know the advantages due to Tourism.

4. Tax Base to be increased from 3% to 15% of the Population

1. After 67 years of Independence only 3% of the population is Tax Payers and 6% are Tax assesses! A matter of regret and shame.
2. No use flogging people like us who are paying taxes since 52 years!
3. Need to rope in others out of the renaming 97% of the population.
4. For example it has been reported that for every one organization which is connected to the Central Govt. Data base there are **127 Shadow Companies?** Ministry of Company Affairs catalogue Public Ltd. and Private Ltd. companies; but what about Partnership and Proprietary organizations?
5. I have written a letter to the PM on this subject in May 2014

5. Agriculture

1. Need to improve all crop productivity to World Class levels.
2. China has less arable land than India, but their food grain production is nearly 220% of India!
3. We have better sunshine, climate and water resources; but China has 93% literacy and 350,000 Skill Centres in Rural China alone!
4. We should aim for 650 million tons per year of production of food grains from the present 250 million tons per year.
5. Chambers of Commerce do not give much importance to Agriculture. Mostly importance is given to services and manufacturing. Consider advantages of Organic Farming Vs Chemical Farming.

6. Healthcare

1. The PMO have already identified this sector but we need to make out National Goals for the next 5 years.
2. Why can't we triple the number of medical colleges? Why should our youth go to China to study medicine; since License Raj in Higher education demands Capitation fees of Rs 50 lacs to Rs. 200 lacs!
3. Why can't we increase the Skilling for existing healthcare personnel by 10 times.
4. There is a huge shortage in India as well the rest of the world.
5. MDG goals to be achieved or improved, ASAP

7. Manufacturing

1. Increasing the manufacturing GDP from 18% to 36%. I had made a draft Policy on Manufacturing in 2002. PM have already recognized the importance. I am sure now things will change. Many variables have to be attended to simultaneously, besides Skills, Labour Reforms, Central & State Policies, Infrastructure, Energy, etc.
2. Customs harassment to exporters is just one area. PM has very rightly pointed this out on the 15th August...Hamara kya...Hame Kyu? In the South Asian countries which I have visited many times the DGFT officers visit the Exporters every month and ask them about their Advance licenses, etc...They say.. "You concentrate on manufacturing & marketing and we will handle the Government paper work".
3. I have written a letter to the PM on Manufacturing Policy, in July 2014.

8. Water & Waste...Rain Water harvesting, Sewage & Effluent Treatment, Solid/Garbage Waste

1. Importance of water NOT fully understood by the people of India
2. Importance of Rain water Harvesting not fully exploited by the people of India.
3. Before we do Interlinking of rivers we should do this in all the 630,000 villages and 9000 municipalities of India.
4. STP & ETP...Sewage Treatment and Effluent Treatment NOT being done. We can easily clean the **Ganga**; but first we have to ensure that only clean water is flowing into it!
5. More than 20% of the Garbage can be easily converted to Manure, for agriculture

9. MSME

1. Importance of MSME's NOT fully understood by States, Central Government, Banks, etc. 94% of our work force is in MSME's. There are 200 million MSME's. 80% in Agriculture and 20% in services and manufacturing
2. In 2002-2003, I was in the national committees of both CII & FICCI on SSI(small scale industry). Having worked before that for nearly 7 years in Germany & Japan, I understood the importance of MSME's. The then President of FICCI took it up with Atal Ji; the rest as we know is history.
3. Present definition needs to be brought in-line to the EU definition to make our MSME's world class.
4. I have written a letter to the PM about MSME's on the 4th of August, 2014

10. Infrastructure - Transport as well as Urban & Rural

1. PM's Agenda on this is very strong.
2. The NDA Government has already started moving very fast on this.
3. I have nothing to add, excepting that by 2050 nearly 70% of our population will be in Urban areas. Presently only 30% is in Urban areas.
4. Urban Planning is missing in India. It is mostly decided by the politicians and the officials of the State and Central Government . India has 3000 urban planners. We need 300,000 urban planners. Mumbai has 2 urban planners but Singapore has 100 urban planners. **Indian Colleges should teach Urban Planning.**

11 Solar Energy

1. Aim for 3,00,000 MW installed capacity
2. If a small country like **Germany can install 25,000 MW of Solar power per year**, (50% on roof tops) why we cannot plan and install for 10,000 MW of Solar Power per year?
3. Our production capability and potential of solar power is nearly 3X more per sq metre of solar panel area as compared to Germany?

Shri Narendra Modi
Hon'ble Prime Minister
Government of India

23rd of December 2014

Why India needs **Organic Farming** & not **Chemical Farming**

Respected Modi Ji,

1. India has a **population** of 123 crores.
2. Total **work force** in India is nearly 49 crores out of which nearly 60% or about 30 crores are in agriculture, forestry, horticulture, floriculture and animal husbandry.
3. **Organic Farming** should become a part of the **PMO's priority** for Nation Building, like sanitation, toilets and swatch bharat, etc.
4. India needs **Labour intensive solutions**, as that is our present strength.
5. India has more than **80 million families** that live on farming.
6. Most of the land holdings are **less than 2 hectares**.
7. Organic Farming is a big **employment generator**.
8. Already **60% of the work force** is in agriculture, farming and animal husbandry.
9. There is a huge **international demand for organic food, organic cotton** and so on, this can become one of India's largest export product in the years to come
10. **Organic Farming** covers all aspects of farming, horticulture, agriculture as well as animal husbandry.
11. The two attachments will show that **Organic Farming** is a win-win solution unlike **Chemical Farming** which is a loose-loose solution.
12. **Chemical Farming** does not have any medium term or long term advantages
13. In India it should also be extended to Flora & Fauna required for **Ayurveda Medicines**; which can grow exponentially with availability of the purest form of raw materials.
14. It will **prevent the degradation** of the soil and ground water used by humanity.
15. It is the only alternative to **Sustainable Agriculture vs Chemical Farming**
16. We suggest a tie up of all our agriculture colleges and relevant CSIR laboratories with the world's oldest and most prestigious Organic Farming Institute in Switzerland, Germany & Austria for all aspects of **Organic Farming**. See www.fibl.org. *i Watch* has exclusive arrangement with them for imparting Skills & Vocational Training courses.
17. We suggest that all **Agricultural colleges** should teach this subject on a priority
18. **IIT-Kgp which has 200 acres of farm lands** and a very big department of Agriculture should tie up with FIBL in Switzerland to exchange the research work done by them since the last 41 years.
19. All the 660 districts should have **Soil Testing laboratories**, which is the starting point for Organic Farming. Prime Minister Narendra Modi already started this as CM in Gujarat.
20. Other relevant Ministries, such as Rural Development, Agriculture, HRD, Labour, MSME, Commerce, Finance, Industry, etc need to make it as part of their focus and priority areas.
21. At the State & UT levels the advantages of **Organic Farming vs Chemical Farming** needs to be explained and nurtured.
22. Kindly feel free to contact us for further information about **Organic Farming & FiBL**.
23. We plan to train 10,000 to 100,000 farmers in Organic Farming per year.

With Regards & Respects

Krishan Khanna
Chairman & Founder

Seven Reasons why Organic Farming will Outperform Conventional Chemical Farming

Sustainable, organic farming practices are the best way to feed the future...

A few generations ago, in the 1930's, approximately 45% of Americans lived on farms. This demographic gradually but steadily declined as people migrated to urban centers, and over time, to suburbs. Today, only about 960,000 people claim farming as their principal occupation, which represents less than 1% of the US population.

During the same period of time the US population has more than doubled, and demand for agricultural products has increased accordingly.

It is a testament to human ingenuity that the mechanics of farming has managed to keep pace with an ever-expanding demand even as the number of farms has declined. Farm machinery has become larger, more efficient and more productive. New crop varieties have been developed which resist common pests and diseases while producing larger yields. Chemical fertilizers and pesticides have become increasingly effective, allowing farmers to produce larger crops without the need for additional human labor.

Farmlands have become increasingly dependent on chemical fertilizers which have short-term benefits but contribute to soil depletion over time.

But while today's large scale food producers

continue to profit and consumers see supermarket shelves overflowing with farm products, the unseen costs of our dependence on agribusiness exert a mounting toll. Farmlands have become increasingly dependent on chemical fertilizers which have short-term benefits but contribute to soil depletion over time. Water retention is diminished in non-organic farmland, resulting in erosion of topsoil with chemical residues entering watersheds. We consumers have quietly accepted these changes in farming practices as the cost of feeding a growing nation, and because there seem to be no practical alternatives.

Recent experiments in small organic farming practices, and the release of a 30-year side-by-side farming study by the Rodale Institute, have shown this reasoning to be fundamentally flawed. Organic farming, both large and small scale, is more productive than 'conventional' chemical-dependent farming. Organic farming is not only the best way to feed the world – it is the only way to feed the world in a sustainable way.

Organic farms, contrary to conventional wisdom, outperform conventional farms in these ways:

1. Organic farms are more profitable than conventional farms

The bottom line for farmers, regardless of the practices used, is income. The 30-year side-by-side Rodale study showed that organic systems were almost three times as profitable as conventional

systems. The average net return for the organic systems was \$558/acre/ year versus just \$190/acre/ year for the conventional systems. This figure is skewed because of the higher price organic farmers receive for their produce and meat, but the higher food costs alone cannot account for the difference in profitability. Lower input costs for organic farm systems are credited with significant cost savings for the farmer.

The relatively poor showing of GM crops in the Rodale study echoed a study from the University of Minnesota that found farmers who cultivated GM varieties earned less money over a 14-year period than those who continued to grow non-GM crops.

2. Organic yields equal or surpass conventional and GM yields

The Rodale 30-year study found that after a three-year transition period, organic yields equalled conventional yields. Contrary to fears that there are insufficient quantities of organically acceptable fertilizers, the data suggest that leguminous cover crops could fix enough nitrogen to replace the amount of synthetic fertilizer currently in use.

In a review of 286 projects in 57 countries, farmers were found to have increased agricultural productivity by an average of 79%, by adopting “resource-conserving” or ecological agriculture (Pretty et al., 2006).

3. Organic crops are more resilient than conventionally grown and GM crops

Organic corn yields were 31 per cent higher

than conventional yields in years of drought. These drought yields are remarkable when compared to genetically modified (GM) “drought tolerant” varieties, which showed increases of only 6.7 per cent to 13.3 per cent over conventional (non-drought resistant) varieties.

The effects of climate change bring more uncertainty to farming, with increased drought predicted for some parts of the country. It has become obvious that weather patterns are changing, and looking to the future, food crops will need the resilience to adapt.

4. Organic farming is more efficient than conventional farming

Conventional agriculture requires large amounts of oil to produce, transport and apply fertilizers and pesticides. Nitrogen fertilizer is the single biggest energy cost for conventional farming, representing 41% of overall energy costs. Organic systems used 45% less energy overall than conventional systems. Production efficiency was 28% higher in the organic systems, with the conventional no-till system being the least efficient in terms of energy usage.

The extra energy required for fertilizer production and farm fuel use in conventional systems also contributes to greenhouse gas emissions (GHG). Conventional systems emit almost 40% more GHG per pound of crop production in comparison to the organic systems.

5. Organic farming builds healthier soil

While short-term benefits are realized with the use of chemical fertilizers and mechanized production methods, every gardener knows that

soil health cannot be compromised in the long term. Eventually, soil-depleting practices take their toll as soil structure weakens, microbial life declines and erosion removes valuable topsoil from farmland.

The Rodale study found that overall soil health is maintained with conventional systems, but soil health is improved when using organic farming practices. Organic farming practices improve moisture retention which creates water ‘stores’ which plants can draw on during times of stress due to drought and high winds.

According to the Environmental Working Group and soil scientists at Iowa State University, America’s “Corn Belt” is losing precious topsoil up to 12 times faster than government estimates.

6. Organic farming keeps toxic chemicals out of the environment

Conventional systems rely heavily on pesticides (herbicides, insecticides, fungicides) many of which are toxic to humans and animals. With more than 17,000 pesticide products (agricultural and non-agricultural) on the market today, the EPA is unable to keep up with adequate safety testing. In fact, the EPA has required testing of less than 1% of chemicals in commerce today.

Many studies link low level exposure of pesticides to human health problems, and chemical residue from pesticides used in farming can be commonly found in air and water samples as well as in the food we eat.

Inactive ingredients in pesticide and herbicide formulations have been found to be as toxic as

active ingredients, but are not tested for human health impacts.

7. Organic farming creates more jobs

Industrial agriculture has replaced human hands with machines and chemical inputs. According to the EPA, in the last century agricultural labor efficiency increased from 27.5 acres/worker to 740 acres/worker. Joel Salatin, organic farmer and author of best-selling books on sustainable farming, views these statistics as another reason for us to return to our farming roots. “People say our system can’t feed the world, but they’re absolutely wrong,” he says, “Yes, it will take more hands, but we’ve got plenty of them around.”

One important aspect to consumer support of conventional farming practices is the cost of food. Organic produce and meat is higher priced than non-organic counterparts. But, according to Joel Salatin, we get what we pay for. “We spend around 10% of our income on food and some 16% on health care, and it used to be the reverse.”

Our current food production system is in need of repair. We need to promote organic systems which respect the integrity of soil health and sustainable systems. Until recently it was thought that our national and global food needs were too big to be met with natural, organic food production systems. Recent studies confirm, however, that organic farming is the way of the future. We need, both collectively and as individuals, to support the organic food movement to enable the process to move forward with the research, seed development and farming practices needed to feed a hungry world.

Shri Narendra Modi

Hon'ble Prime Minister

Government of India

10th of February 2015

Indian MSME's can learn & benefit from the 37 EU Countries

Country wise dossier in 640 pages of 37 EU countries with detailed data on MSME's is available*. (Priced publication from our foundation)*

EU is in many ways like India, with very large economies like UK, Germany, Poland, Spain, France, Italy etc. and very small countries like Cyprus, Iceland, Liechtenstein, Malta, Montenegro, etc. India has 30 states and 6 union territories.

EU nations also have many languages and diversified cultures like India.

Information in the report has been arranged in alphabetical order. The total number of MSME's in the EU is 25,122,962. The gist of the reports of the 37 countries is:- (See pages 132 & 133)

1. **0.20% are large** companies 49,424 units
2. **1.00% are medium** companies 252,421 units
3. **5.86% are small** companies 1,482,588 units
4. **92.94% are micro** companies 23,338,529 units

India in **2015** will have to also finally **catalogue and locate** our MSME's in the **Manufacturing & Services** Sector.

In **2015** the present **RBI definition** of Indian MSME's needs to be modified to bring them in line with International Norms **such as in the 37 countries of the EU**, so as to make our Indian MSME's competitive, productive, producing high quality and become world class.

According to our Research Team **locating, identifying and redefining our MSME's** will have the following advantages to the Nation:

1. **Importance of MSME's** will be fully appreciated by all stake holders of the Indian Economy. This is not the case at present. Will change once we know where are MSME's are?
2. **Increase of Tax base** from the present 3% to perhaps 15% in the next 10 years.
3. When this happens, the **tax rates can be reduced** from the present 30% to 15%
4. Prepare the ground for sending **300 lacs apprentices for skill building** against the present 2.7 lacs. In most EU countries nearly **95% apprentices are with MSME's**
5. Up gradation, innovation, financial and all other types of **assistance is possible** once we know where our MSME's are and which sectors of the economy they belong to?
6. Will help identify Indian partners for **"Make in India"** initiatives. When foreign delegations come most of them are looking for partners in the MSME sectors in different verticals of the economy. Presently India is losing out.
7. This is always a mystery as we have hundreds of Chambers of Commerce and **nobody really knows** where are the **present locations**; and what is the relevant **description, track record and competence of Indian MSME's?**
8. **Big thrust for exports.** We could then plan for an export target of say US\$ 1000 billion or US\$ 1 trillion from the present \$ 350 billion. MSME's will play an important role.
9. **Huge employment generation** possible to absorb **10 million** people per year.
10. **Priority lending** can then be focused on relevant MSME's.
11. Many Micro units will migrate to Small, Small to Medium and some Medium to large units.
12. **We must remember** that once upon a time, Infosys, Hero Motors, TVS were MSME's too!

With Regards & Respects

Krishan Khanna

Chairman & Founder

Compilation of Size & Number of MSME'S in EU countries

Sr.No.	Country	Micro	Small	Medium	Large	Total
1.	Albania	73,748	2,839	503	89	77,179
2.	Austria	269,497	32,818	5,015	1,047	308,377
3.	Belgium	489,410	27,082	4,204	848	521,544
4.	Bulgaria	275,908	22,194	4,091	623	302,816
5.	Croatia	134,091	10,091	1,722	388	146,292
6.	Cyprus	37,637	2,726	439	79	40,881
7.	Czech Rep	968,998	31,850	6,273	1,406	1,008,527
8.	Denmark	191,097	18,569	3,201	608	213,475
9.	Estonia	54,572	4,824	982	151	60,529
10.	Finland	204,307	15,145	2,580	587	222,619
11.	France	2,439,919	136,367	21,740	4,843	2,602,866
12.	Macedonia	48,580	3,937	707	129	53,353
13.	Germany	1,809,029	336,111	56,004	10,608	2,211,752
14.	Greece	629,811	21,669	2,464	423	654,367
15.	Hungary	497,947	23,906	4,064	829	526,746
16.	Iceland	24,248	1,295	213	61	25,816
17.	Ireland	128,363	13,595	2,416	424	144,798
18.	Israel	342,624	23,445	3,900	967	370,936
19.	Italy	3,527,452	171,658	19,126	3,139	3,721,375
20.	Latvia	78,200	7,905	1,511	186	87,802
21.	Liechtenstein	2,566	349	55	10	2,980
22.	Lithuania	121,502	10,442	2,165	282	134,391
23.	Luxembourg	25,658	3,129	605	144	29,536
24.	Malta	28,905	1,298	291	54	30,548
25.	Montenegro	19,728	1,127	230	42	21,127
26.	Netherlands	752,444	42,339	8,304	1,435	803,522
27.	Norway	259,250	19,597	2,930	615	282,392
28.	Poland	1,407,427	52,676	14,850	2,940	1,477,893
29.	Portugal	739,555	30,732	4,547	722	775,556
30.	Romania	373,944	44,682	7,669	1,455	1,27,750
31.	Serbia	272,299	8,984	2,103	488	283,874
32.	Slovakia	375,780	13,810	2,213	465	392,268
33.	Slovenia	109,050	5,470	1,078	211	115,809
34.	Spain	2,129,549	109,212	14,016	2,669	2,55,446
35.	Sweden	631,004	29,670	5,145	996	666,815
36.	Turkey	2,326,148	42,641	18,132	3,506	2,390,427
37.	UK	1,538,282	159,407	26,933	5,955	1,730,577
	Total	23,338,529	1,482,588	252,421	49,424	25,122,962
		92.94%	5.86%	1.00%	0.20%	100%

Research reports about MSME'S in 37 EU countries, Brazil, S. Afric, Russia, Japan available from *i Watch*

Compilation of **MSME** Data for **EU** & the **BRICS** countries

Sr.No.	Country	GDP(PPP) \$ Billions	Pop/Millions	Per Capita(PPP) \$ /yr.
1.	Albania	28	3.00	10,000
2.	Austria	361	8.22	42,600
3.	Belgium	422	10.05	37,800
4.	Bulgaria	105	6.95	14,400
5.	Croatia	79	4.47	17,800
6.	Cyprus	22	1.17	24,500
7.	Czech Rep	287	10.63	26,300
8.	Denmark	211	5.57	37,800
9.	Estonia	30	1.26	22,400
10.	Finland	196	5.27	35,900
11.	France	2,276	66.26	35,700
12.	Macedonia	23	2.09	10,800
13.	Germany	3,227	80.99	39,500
14.	Greece	267	10.77	23,600
15.	Hungary	197	9.92	19,800
16.	Iceland	13	0.32	40,700
17.	Ireland	190	4.83	41,300
18.	Israel	273	7.82	36,200
19.	Italy	1,805	61.68	29,600
20.	Latvia	39	2.17	19,100
21.	Liechtenstein	3	0.37	89,400
22.	Lithuania	67	3.51	22,600
23.	Luxembourg	43	0.52	77,900
24.	Malta	11	0.41	29,200
25.	Montenegro	7	0.65	11,900
26.	Netherlands	700	16.88	43,300
27.	Norway	282	5.15	55,400
28.	Poland	814	38.35	21,100
29.	Portugal	244	10.81	22,900
30.	Romania	288	21.73	14,400
31.	Serbia	81	7.21	11,100
32.	Slovakia	133	5.44	24,700
33.	Slovenia	58	1.99	27,400
34.	Spain	1,389	47.74	30,100
35.	Sweden	394	9.72	40,900
36.	Turkey	1,167	81.62	15,300
37.	UK	2,387	63.74	37,300
38.	Brazil	2,416	203.00	12,100
39.	Russia	2,553	142.00	18,000
40.	India	4,990	1236.00	4,000
41.	China	13,390	1356.00	9,800
42.	S. Africa	596	48.38	11,500

Research reports about MSME'S in 37 EU countries, Brazil, S. Afric, Russia, Japan available from *i Watch*



EUROPEAN SMEs

according to Annual Report
on European SMEs 2013/2014

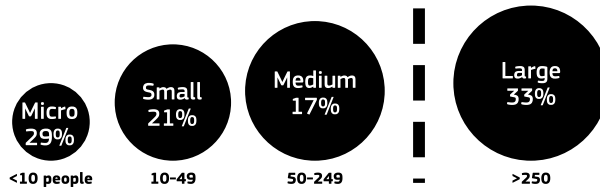
1 SMEs AS THE BACKBONE OF EUROPEAN ECONOMY



SMEs employ 2 in every 3 employees
and **produce 58 cents in every euro**
of **value added**¹



SMEs EMPLOYMENT



5 KEY SECTORS² ACCOUNT FOR:



¹Value added = net contribution of the company to the economy

²Manufacturing, construction, business services,
accommodation and food, wholesale and retail trade

Shri Narendra Modi
Hon'ble Prime Minister
Government of India

15th February 2015

World's Best Toilet - *Addresses the following:*

1. India has **16%** of the world's population but only **4%** of the world's freshwater.
2. To flush **0.8 litres** of human excreta, each person wastes **10 litres** of clean water per flush.....or destroys nearly **16,000 litres** of good water per year per person.
3. India has installed sewage treatment capacity **for just 27.8% of total sewage generation**
4. **5 of the top 10 killer diseases** of children aged 1 to 14 in rural areas are related to water & sanitation
5. India, with its 620 million people still defecating in the open, **needs an environment friendly sanitation solution**

Benefits of Bio-Toilets from i Watch-MART

1. Reduction of the volume of excreta on site through mesophilic composting such that after 6 years only **2% of the original volume is left**
2. Nitrification of the **urine to yield a natural fertilizer** which is completely odor-free and does not have microbial contamination
3. Reduces disease potential
4. No Scavenging
5. Does not contribute to sewage and hence does not cause any water pollution
6. Saves water: only 1 litre of self-cleansing water is required. **Total water saved annually per person is $45 \times 365 = 16,425$ litres**
7. Does the Bio-Cycle from Nature to Nature
8. Suitable for any terrain including flood-prone areas
9. Easy to construct and maintain. No chemicals needed to clean the toilet
10. **Tested Swedish technology over the last 40 years.**
11. Operating in many countries such as the EU, USA, Japan, etc.....

With Regards & Respects

Krishan Khanna
Chairman & Founder

'i Watch' is a not-for-profit organization & Think Tank located in Mumbai, India. 'i' stands for INDIA, Indians you and me. 'i Watch' means that we are 'watching' what is happening in the country and reporting to the citizens, in order to create awareness for the sake of improvement. The 'i' is small, since our Gurus have taught always that only with humility can we perceive the truth. 'i Watch' focuses on Human Resource Development, Governance & how it influences Economy & Enterprise. 'i Watch' has four activities viz., 'India 1st' for Governance, 'Education 1st' for HRD, 'Economy 1st' for Economy & Enterprise and 'Employment 1st' for Employment Generation

Shri Narendra Modi

Hon'ble Prime Minister

Government of India

21st of February 2015

Matra Bhasha Diwas celebrations should result in all Central Government websites in **22 Indian Languages**

I **congratulate** the new NDA government, headed by you, to recognize and celebrate this very important aspect of our country.

We must all **celebrate this day right through the year** by relevant action and implementation so as to benefit the 125 crore people of this Great Nation.

We are now in the **68th year of our Independence**. We need to finally reach out to each and every citizen in all corners of our country by being sensitive to each part of the country, represented by the presence of distinct, ancient and very rich 22 Indian languages.

The **English** language is only understood by about **8%** of the population; hence the importance of communicating in our 22 Indian languages, as stated in our Constitution, cannot be over emphasized. We need to reach out to the balance 92% of our people.

Inclusive growth will only be possible if we communicate in all the 22 Indian languages.

Social justice will only be possible if we communicate in all the 22 Indian languages.

Regional media and the 30 States and 6 Union Territories will not be able to fully understand the full impact and full understanding of the Central Government unless we communicate in all the 22 Indian languages.

We need to celebrate the **diversity and complexity** of our Nation by understanding the actual presence of the 22 Indian languages; which translates into different and colorful presence of different traditions, cultures, history, arts, crafts, music, food, literature, clothing, theatre and music.

I am sure that the **Reserve Bank of India** will also take note of this very delicate and sensitive matter and change the design of all Indian currency to incorporate all the 22 Indian languages in future designs. (Presently only 15 languages are mentioned)

We look forward to the Central Government and the various State Governments **to take appropriate action to incorporate and use** of all the 22 Indian languages so as to reach out to each and every citizen of India.

Foreign Institutions understand India, do we? For example:

1. Google is in 9 Indian Languages.
2. Oracle data base is in 11 Indian Languages.
3. Microsoft MS Office is in 15 Indian Languages.

With Regards & Respects

Krishan Khanna

Chairman & Founder



नरेन्द्र मोदी
माननीय प्रधान मंत्री



स्मृति प्रूबिन इरानी
माननीय मानव संसाधन विकास मंत्री

मातृभाषा दिवस

शनिवार, 21 फरवरी 2015




श्री उपेंद्र कुशवाहा
मानव संसाधन एवं विकास मंत्री
पहल फरवरी
(स्कूल शिक्षा और साक्षरता)



श्री उपेंद्र कुशवाहा
मानव संसाधन एवं विकास मंत्री
पहल फरवरी
(स्कूल शिक्षा और साक्षरता)

पहला भाव मातृभाव पहली भाषा मातृभाषा

असमिया / Assamese अथय छाब मातृछाब अथय छाब मातृछाब	बांगला / Bengali अथय छाब मातृछाब अथय छाब मातृछाब	बोडो / Bodo मिनि सोन्दायि मिनि सोन्दायि मिनि राब विनराब	डोंगरी / Dongeri पहला भाव माक दा भाव पहली भाषा माक दी भाषा	गुजराती / Gujarati पहेली भाव मातृभाव पहेली भाषा मातृभाषा	हिंदी / Hindi पहला भाव मातृभाव पहली भाषा मातृभाषा	कन्नड़ / Kannada ಮೊದಲ ಭಾವನೆ ಮೊದಲ ಭಾವನೆ ಮೊದಲ ಭಾವನೆ	कश्मीरी / Kashmiri مۆدەل ۋە مەنەل مۆدەل ۋە مەنەل مۆدەل ۋە مەنەل	पंजाबी / Punjabi ਪਹਿਲਾ ਭਾਵ ਮਾਂ-ਵੀ ਭਾਵ ਪਹਿਲੀ ਭਾਸ਼ਾ ਮਾਂ-ਤੋ ਭਾਸ਼ਾ
कॉकनी / Konkani पयलो भाव मातृभाव पयली भास मातृभास	मैथिली / Maithili पहिल भाव मातृभाव पहिल भाषा मातृभाषा	मलयालम / Malayalam മലയാളം മലയാളം മലയാളം	मणिपुरी / Manipuri ਭਾਤ ਭਾਤ ਭਾਤ ਭਾਤ ਭਾਤ ਭਾਤ ਭਾਤ ਭਾਤ ਭਾਤ	मराठी / Marathi पहिली भाषा मातृभाषा पहिली भाषा मातृभाषा	नेपाली / Nepali पहिलो भास मातृभाव पहिलो भाषा मातृभाषा	ओरिया / Oriya ପ୍ରଥମ ଥରକୁଡ଼ି ମାତୃ-ଥରକୁଡ଼ି ପ୍ରଥମ ଭାଷା ମାତୃଭାଷା		
संस्कृत / Sanskrit प्रथमः भावः मातृभावः प्रथम भाषा मातृभाषा	संथाली / Santhali एवहोप भाव आयो भाव एवहोप पावली आयो पावली	सिंधी / Sindhi पहियों पावु मातृभाव पहिली भाषा मातृभाषा	तमिल / Tamil தலைப்பற்றி தாய்ப்பற்றி தலைமொழி தாய்மொழி	तेलुगु / Telugu మొదటిభావము మొదటిభావము మొదటిభావము	उर्दू / Urdu ملى ڪا احساس ملاى احساس ملاى احساس		 मानव संसाधन विकास मंत्रालय स्कूल शिक्षा और साक्षरता विभाग उच्चतर शिक्षा विभाग	

Shri Narendra Modi
Hon'ble Prime Minister
Government of India

31st of March 2015

Fundamentals for 'Swacch Bharat'

1. Importance of **Rain Water Harvesting** to Recharge Ground Water
2. Importance of **Organic Farming V/S Chemical Farming**
3. **Sewage & Effluent Treatment** using Bio-Sanitizer
4. **Safe Drinking Water @ 1 np per litre**
5. **Best Toilet in the World** - Saves 16,000 litres of water per person per year

1. Importance of Rain Water Harvesting

India is blessed with a lot of rain water. However, most of it falls within 3 months of the year and nearly 50% within a month. All the more reason to practice RWH so as to recharge the ground water for use in the balance 9 months of the year. See also our article on page 26, **Agriculture: Advantage INDIA**.

In the NDA one regime I had interacted many times with Shri Suresh Prabhu, Hon'ble Minister for Interlinking of river waters during 2002 to 2004. He agreed in Principle to start **Rain Water Harvesting** in all the 635,000 villages of India and later on in the semi-urban and urban areas of the country. The program was to start after the general elections of 2004. We lost 10 years, between 2004 to 2014. We need to make this once again a National Priority under **Swacch Bharat** initiative of the PMO.

Water is an integral part of functioning ecosystems. Its presence or absence has a bearing on the ecosystems services they provide. Relatively larger amounts of water are used to generate the ecosystem services needed to ensure provisioning of basic supplies of food, fodder and fibers.

There are numerous positive benefits for harvesting rainwater. The technology is low cost, highly decentralized empowering individuals and communities to manage their water. It has been used to improve access to water and sanitation at the local level.

In agriculture, rainwater harvesting has demonstrated the potential of doubling food production by 100% compared to the 10% increase from irrigation. Rain fed agriculture is practiced on 80% of the world's agricultural land area, and generates 65-70% of the world's staple foods.

The biggest challenge with using rainwater harvesting is that it is not included in water policies in many States and Union Territories of India. In many cases water management is based on renewable water, which is surface and groundwater with little consideration of rainwater harvesting.

Rainwater is taken as a 'free for all' resource and the last few years have seen an increase in its use. This has resulted in over extracting, drastically reducing water downstream users including ecosystems. This has introduced water conflicts in some regions of the country. For the sustainable use of water resources, it is critical that rainwater harvesting is included as a water sources as in the case for ground water or surface water.

2. Importance of Organic Farming V/S Chemical Farming

Details are in the four page detailed note with advantages of **Organic Farming V/S Chemical Farming** are clearly highlighted. Kindly see pages 127 to 130.

3. Sewage & Effluent Treatment using Bio-Sanitizer

See page 103 for details and pages 95 to 106 about our other Social Projects.

4. Safe Drinking Water @ 1 np per litre

See page 104 for details and pages 95 to 106 about our other Social Projects.

5. Best Toilet in the World

See page 135 for details and pages 95 to 106 about our other Social Projects.

With Regards & Respects

Krishan Khanna

Chairman & Founder



Internationaler Bund
Freier Träger der Jugend-,
Sozial- und Bildungsarbeit e.V

Zentrale Geschäftsführung

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1st of May 2015

To whom it may concern

**MOU to enhance 'Skilling INDIA' &
'Make in INDIA' as per the requirements
of the Government of INDIA.**

IB, Germany has signed an exclusive 5-year MOU with *i Watch*, India for Vocational Training Courses and other related matters.

The Focus of this MOU is to bring and use **IB** Vocational Education & Training (VET) courses into India, for the use of Indian Learners in all parts of India. *i Watch* will be the bridge for **IB's** entry into India, starting with VET courses from **IB**.

IB is a 67 year old social organization with nearly 12,000 employees spread across the whole of Germany in 300 locations with nearly 700 facilities catering to nearly 350,000 people per year. **IB** specializes in many areas one of them being Vocational Training courses for empowerment and skill building of the youth and unemployed in Germany. see www.internationaler-bund.de (German) and www.Internationaler-Bund.org (English)

i Watch, is a 22 year not-for-profit foundation started in 1992 and working on the Transformation of India. The main focus is to empower the people of India through relevant education and vocational training. *i Watch* works pan India and has all its main literature and publications in English and 12 main Indian languages. It has 12 key personnel, and works with seven professional organizations with nearly 600 employees to implement actual projects on the ground. see www.wakeupcall.org.

This MOU is to bring into India, Vocational Education & Training courses and other related matters from **IB** and **IB** associates in Germany.

This MOU is valid for a period of 60 months the 1st of May 2015.

On behalf of the Internationaler Bund (**IB**) Germany

Sebastian Engmann
Managing Director Products & Programs



Forschungsinstitut für biologischen Landbau
Institut de recherche de l'agriculture biologique
Research Institute of Organic Agriculture
Istituto di ricerche dell'agricoltura biologica
Instituto de investigaciones para la agricultura orgánica

Frick, 28 May 2015

To whom it may concern

MOU to enhance 'Skilling INDIA' & 'Make in INDIA' as per the requirements of the Government of INDIA

FiBL, Switzerland has signed a 5-Year exclusive MOU with *i Watch*, India for imparting Vocational Education and Training Courses and other related areas of interest to agriculturists in India.

FiBL is the world's oldest Research Institute in the field of Organic Farming. The year 2013 marked the 40th anniversary of FiBL, the Research Institute of Organic Agriculture. See www.fibl.org

Browsing through **FiBL's** archives reveals fascinating insights into the full development of modern organic farming in Switzerland and throughout the world. The first standards adopted by the Swiss federation of organic organisations (Vereinigung schweizerischer biologischer Landbau- Organisationen, VSBLO) – now Bio Suisse – covered just four pages of paper; the first standards of the International Federation of Organic Agriculture Movements (**IFOAM**) only needed two. The Bud emblem emerged from the **FiBL** logo to become the mark of certified organic agriculture, and is now a successful marketing instrument of Bio Suisse, a confident and strong institution. Organic inspections were initially carried out by external consultants. This has transformed into a modern inspection system in line with ISO standards. **FiBL** staff have been instrumental in the development of IFOAM's international organic standards, the United Nations organisations' Codex Alimentarius, and the European Union's regulations. Important recent milestones of **FiBL's** history have included the founding of **FiBL Germany** and **FiBL Austria** in the early 2000s.

The mission of **FiBL's** Department of International Cooperation is to develop and promote sustainable agricultural and marketing systems in developing and transitional countries in order to improve the well-being of poor rural households and to increase overall access to sufficient amounts of good-quality, fairly-priced food.

i Watch is a 22 year not-for-profit foundation started in 1992 and working on the Transformation of India. The main focus is to empower the people of India through relevant education and vocational training.

i Watch works pan India and has all its main literature and publications in English and 12 main Indian languages. It has 12 key personnel, and works with seven professional organizations with nearly 600 employees and associates to implement actual projects on the ground. See www.wakeupcall.org

This MOU is valid for a period of 60 months from the 1st of January 2015.

Prof. Dr. Urs Niggli

EXCELLENCE FOR SUSTAINABILITY

Das FiBL hat Standorte in der Schweiz, Deutschland und Österreich
FiBL offices located in Switzerland, Germany and Austria
FiBL est basé en Suisse, Allemagne et Autriche

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Readers respond to *i Watch*

Feedback and Response received from Indian organizations and individuals, during the last ten years has been documented, based on letters and communications received.

A selection of some of these communications has been compiled into a dossier and available for inspection at our office in Mumbai. Some of the feedback is mentioned in the pages below.

In short, we are quite happy about the mindset change and action plans initiated in different parts of India, based on the above strategy adopted by *i Watch*,

- I hope to use some of the wisdom gleaned from your paper in the formulation of my policies of corporate governance.

N.R. Narayana Murthy, Chairman & Chief Mentor, Infosys

- The Chamber appreciates the good work *i Watch* has been doing for the benefit of the citizens.

P.N. Mogre, Secretary General, Indian Merchants Chamber

- The mission of *i Watch* has been the Mission of Krishan Khanna to innovate and transform where ever he was involved in work or life.

Dr. P.S. Rana, Chairman & Managing Director, HUDCO

- We interact with more than 500 NGO's and we must say that we have found *i Watch* a unique and innovative NGO.

Vinay Somani, Managing Trustee, Karmayog.com

- We believe in the ideas and suggestions of *i Watch* to bring the policies to optimum benefit for the people of India.

Anupam Mittal, President & CEO, People group

- I have not heard of any NGO like *i Watch* which has such a holistic plan for Transforming India.

Maj. Gen. D.N. Khurana, Director General, All India Management Association.

- I really appreciate *i Watch's* endeavour in creating awareness, suggesting solutions and action plans, assisting and networking with various stakeholders in the actual implementations of plans towards Educational Reforms and Transforming India.

Sushma Berlia, President, Education Promotion Society for India

- They have set out to create a framework for achieving high and sustainable growth for India. For this they are working to build consensus and influence

policy changes. This is indeed a very unique strategy designed to have a far-reaching impact.

Rajiv Kumar, Chief Economist, CII

- *i Watch* is doing a wonderful job in making the people understand and specify relevant policy changes required and the importance and need of Good Governance to benefit the people of India.

Dr. B.P. Dhaka, Secretary General, PHDCC&I

- As an educationist and HRD consultant I strongly believe that the plan of *i Watch* for training 95% of the youth in 3000 areas of Vocational education is most innovative. If implemented, it would prove to be a major solution for the unemployment problem in India

Prof. Rooshikumar Pandya, International Management Guru

- I have read with interest your book titled, *Transforming India*, and would like to convey my compliments to you for the very useful studies and suggestions contained in this. I have no doubt that the issues raised and the recommendations made are of immense value.

B.N. Yugandhar, Member Planning Commission

- Regarding Good Governance, I look forward to having detailed discussions with you to follow-up on some of the suggestions contained in your book, *Transforming India*.

M. Damodaran, Chairman & Managing Director, IDBI

- I am aware of the good work being done by *i Watch*. I have noted your views regarding good governance, training and employment.

M. Venkaiah Naidu, President, BJP

- Please keep up the good work.

Dr. Natarajan - Chairman, All India Council for Technical Education

- I was very impressed with your whole program and your efforts to elevate India.

Babu Khalfan, NRI based in USA

- The vision with which *i Watch* has been set up is indeed a very timely effort for better governance. We would be glad to be associated with your foundation.

Deepankar Sanwalke, Executive Director, KPMG

- At the outset, let me congratulate you on all your presentations and I feel happy and honoured that you have shown interest in our working together on

Readers respond to *i Watch*

vocational education and training. I can see the potential.

Prof. Rupa Shah, Vice Chancellor, S.N.D.T. Women's University

• We welcome you as a founder member of the IC Centre for Governance. The executive committee members of the Centre are impressed by the choice of your core issues and the action plans outlined.

Prabhat Kumar, Former Cabinet Secretary & President, IC Centre for Governance

• Reference your discussions with our Chief Secretary, we will be glad if you hold interactive sessions on Good Governance & Effective Administration for all senior and middle level officers, numbering about 450 of the government of NCT, at the Delhi Secretariat.

Prakash Kumar, AR & IT Secretary, Govt. of NCT

• *i Watch* is invited as a part of the expert panel to comment and suggest on the "India and the World 2025" scenarios at the interactive workshop organized by the **World Economic Forum** and **CII. Confederation of India Industry**

• Please accept my congratulations for the good work which you have done. I would like to take this opportunity to wish you all the best in your work and I am sure your publications will bring about awareness and as well play a very educative role in highlighting the issues and as well as focusing on the areas where we need to give greater attention.

M.V. Rajasekharan, Minister of State for Planning, Planning Commission

• We would deeply appreciate it if you could kindly spare the time to participate in the Conference on NRI—Civil Society Partnership and guide its deliberations.

Dr. Abid Hussain, Chairman, Group for Economic & Social Studies

• I would like to thank you for your support. It has helped us grow into a strong and vibrant organization.

Padmini Somani, Director, Salaam Bombay Foundation

• Your publication makes an interesting reading. I very much appreciate the simplicity and practicality of your approach.

K.L. Chugh, Chairman Emeritus ITC Ltd.

• *i Watch* is doing a wonderful job and the research work you are doing shall give us a lot of inputs for the movement.

Sudesh K. Aggarwal, Secretary General, All Indians Foundation

• I must admit that this is really a very painstaking job and you have amassed a lot of valuable statistics and data. I assure you that with my limited capability I shall try to project your data to all possible forums.

P.N. Roy, Chairman, Indo-Asahi Glass Ltd.

• Your effort to shortlist the maladies looming ominously on our socio-cultural-economic spectrums deserve mention.

R.S. Agarwal, Joint Chairman, Enami Group of Companies

• I critically studied your '**Governance & Administration of India**' paper and came out very deeply impressed and also agitated. It is powerful enough to make everybody sit up and think. It hits the right cord. You have precisely pointed out what ails India.

Prakash Almeida, Director, Institute for Study of Economic Issues

• I am sure this book will set all those who receive it thinking and from thinking at least some will go on to take some action to realize the vision you have sketched.

N. Vittal, Central Vigilance Commission, CVC

• Your perception is superb, ideas are original and some of the statistics are mind boggling. I wish your ideas get a much wider coverage through the all-India media.

H. N. Dastur, Executive Director, Bhartiya Vidya Bhavan

• When awareness is there, the action will also take place and in this crusade I and many Indians are with you. Keep it up.

Sushil Gupta, Past District Governor, Rotary District 3010

• I assure you that I will continue to do whatever is within my power to pursue the **one point agenda** as in your letter.

George Fernandes, Defense Minister, Government of India

• We feel privileged on account of your having favoured us with your valuable experience.

Air Commodore Amrit Lal, Executive Director, Indian Society for Training & Development

• I appreciate your viewpoints expressed in the note and would invite more ideas and pragmatic exercises which can help to develop society in the right direction.


Suresh Prabhu, Minister Railways, Govt. of India.

[illegible]

[illegible]

Transforming INDIA

Empowerment of the People of INDIA Through Relevant Education & Vocational Training



This book is dedicated to the following Sectors

1. Youth of India age up to 35	850 million
2. Those working in the MSME's	600 million
3. Entrepreneurship of age 18 to 35	300 million


Transforming INDIA

an *i Watch* publication by Krishan Khanna

Published in English and twelve Indian Languages

भारत का कायाकल्प

सुशिक्षित निरक्षर और व्यावसायिक शिक्षण के माध्यम से भारतीय जनता का संसाधनमय



इस पुस्तक को समर्पित हैं

1. भारत का युवा जन 35 वर्ष तक	850 करोड़
2. MSME में काम करने वाले	600 करोड़
3. 18-35 की उम्र के उद्योगपति	300 करोड़

ભારતના પરિવર્તનની પ્રવૃત્તિ

સુશિક્ષિત નિરક્ષર અને વ્યવસાયિક શિક્ષણ દ્વારા ભારતીય જનતાને સંસાધનમય




આ પુસ્તક સમર્પિત છે

1. 35 વર્ષની ઉંમર સુધીના ભારતીય યુવાન	850 મિલિયન
2. MSMEમાં કામ કરતા ભારતીય	600 મિલિયન
3. 18 થી 35 વર્ષની ઉંમરના ઉદ્યોગપતિ	300 મિલિયન

भारताचे परिवर्तन

सुशिक्षित निरक्षर और व्यावसायिक शिक्षण के माध्यम से भारतीय जनता को संसाधनमय



इ पुस्तक समर्पित है

1. 35 वर्ष तक की उम्र के भारतीय युवा	850 करोड़
2. MSME में काम करने वाले भारतीय	600 करोड़
3. 18 से 35 की उम्र के उद्योगपति	300 करोड़

પરિવર્તનશીલ ભારત

સુશિક્ષિત નિરક્ષર અને વ્યવસાયિક શિક્ષણ દ્વારા ભારતીય જનતાને સંસાધનમય




આ પુસ્તક સમર્પિત છે

1. 35 વર્ષની ઉંમર સુધીના ભારતીય યુવાન	850 મિલિયન
2. MSMEમાં કામ કરતા ભારતીય	600 મિલિયન
3. 18 થી 35 વર્ષની ઉંમરના ઉદ્યોગપતિ	300 મિલિયન

ভাৰতৰ কায়াকল্প

সুশিক্ষিত নিরক্ষর এবং व्यावसायिक शिक्षण के माध्यम से भारतीय जनता का संसाधनमय




এই পুস্তক সমর্পিত

1. ভারতের যুব জনসংখ্যা 35 বছর পর্যন্ত	850 কোটি
2. MSME-তে কাজ করা ভারতীয়	600 কোটি
3. 18-35 বছর বয়সের উদ্যোগপতি	300 কোটি

ବିହାରୀଭକ୍ତ ଭାରତବର୍ଷ

સુશિક્ષિત નિરક્ષર અને વ્યવસાયિક શિક્ષણ દ્વારા ભારતીય જનતાને સંસાધનમય



ଏହି ପୁસ્ତକ ସମର୍ପିତ

1. 35 ବର୍ଷ ବୟସ સુધીના ભારતીય યુવાન	850 કરોડ
2. MSMEમાં કામ કરતા ભારતીય	600 કરોડ
3. 18 થી 35 વર્ષની ઉંમરના ઉદ્યોગપતિ	300 કરોડ

بھارت کی ماہیت قلبی

સુશિક્ષિત નિરક્ષર અને વ્યવસાયિક શિક્ષણ દ્વારા ભારતીય જનતાને સંસાધનમય



આ પુસ્તક સમર્પિત છે

1. 35 વર્ષની ઉંમર સુધીના ભારતીય યુવાન	850 કરોડ
2. MSMEમાં કામ કરતા ભારતીય	600 કરોડ
3. 18 થી 35 વર્ષની ઉંમરના ઉદ્યોગપતિ	300 કરોડ

ਭਾਰਤ ਦੀ ਕਾਇਆਕਲਪ

ਸੁਸ਼ਿਕ੍ષਿਤ ਨਿਰਾਕਸ਼ਰ ਅਤੇ ਵਪਾਰਿਕ ਸਿੱਖਿਆ ਦੁਆਰਾ ਭਾਰਤੀ ਜਨਤਾ ਨੂੰ ਸੰਸਾਧਨਮਈ




ਇਸ ਪੁਸਤਕ ਨੂੰ ਸਮਰਪਿਤ ਹੈ

1. 35 ਸਾਲ ਤੱਕ ਦੀ ਉਮਰ ਦੇ ਭਾਰਤੀ ਯੁਵਾਨ	850 ਕਰੋੜ
2. MSME ਵਿੱਚ ਕੰਮ ਕਰ ਰਹੇ ਭਾਰਤੀ	600 ਕਰੋੜ
3. 18 ਤੋਂ 35 ਦੀ ਉਮਰ ਦੇ ਉਦਯੋਗਪਤੀ	300 ਕਰੋੜ

ഇന്ത്യയെ സമൃദ്ധമായി മാറ്റുക

സുशिक्षित निरक्षर और व्यावसायिक शिक्षण के माध्यम से भारतीय जनता का संसाधनमय




ഈ പുസ്തക സമർപ്പിത

1. ഇന്ത്യയിലെ 35 വയസ്സ് വരെ യുവാക്കളുടെ എണ്ണം	850 കോടി
2. MSME-യിൽ ജോലി ചെയ്യുന്നവരുടെ എണ്ണം	600 കോടി
3. 18-35 വയസ്സ് പ്രായത്തിൽ ഉള്ള ഉദ്യോഗസ്ഥരുടെ എണ്ണം	300 കോടി

ಭಾರತದ ಪರಿವರ್ತನೆ

સુશિક્ષિત નિરક્ષર અને વ્યવસાયિક શિક્ષણ દ્વારા ભારતીય જનતાને સંસાધનમય




આ પુસ્તક સમર્પિત છે

1. 35 વર્ષની ઉંમર સુધીના ભારતીય યુવાન	850 કરોડ
2. MSMEમાં કામ કરતા ભારતીય	600 કરોડ
3. 18 થી 35 વર્ષની ઉંમરના ઉદ્યોગપતિ	300 કરોડ

ಭಾರತದ ಸಮೃದ್ಧಿ ಮಾಡುವುದು

ಸುशिक्षित निरक्षर और व्यावसायिक शिक्षण के माध्यम से भारतीय जनता का संसाधनमय



ಈ ಪುಸ್ತಕ ಸಮರ್ಪಿತ

1. 35 ವರ್ಷದ ಕ್ಕೆಳಗೆ ಇರುವ ಭಾರತೀಯ ಯುವರಾಜರ ಸಂಖ್ಯೆ	850 ಕೋಟಿ
2. MSME-ನಲ್ಲಿ ಕೆಲಸ ಮಾಡುತ್ತಿರುವವರ ಸಂಖ್ಯೆ	600 ಕೋಟಿ
3. 18-35 ವರ್ಷದ ನಡುವೆ ಇರುವ ಉದ್ಯೋಗಿಗಳ ಸಂಖ್ಯೆ	300 ಕೋಟಿ

இந்தியாவை மாற்றுவோம்

સુશિક્ષિત નિરક્ષર અને વ્યવસાયિક શિક્ષણ દ્વારા ભારતીય જનતાને સંસાધનમય



இந்த புத்தகம் சமர்ப்பி

1. 35 வயதிற்கு கீழ் உள்ள இந்திய இளைஞர்களின் எண்ணிக்கை	850 கோடி
2. MSME-யில் வேலை செய்கிறவர்களின் எண்ணிக்கை	600 கோடி
3. 18-35 வயது வரையில் உள்ள தொழிலாளர்களின் எண்ணிக்கை	300 கோடி