

Transforming India

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



Focus Areas:

1. Education - School, College, Vocational & Career Guidance
2. Governance - Good Administration, Governance & Population
3. Economy - SME's, Exports, Agriculture & Labor Reforms
4. Employment - Jobs, Skills, Entrepreneurship, Productivity & Competitiveness

**Our work is dedicated to the Youth of INDIA and
the 460 million who work in the 100 million MSME's**

iWatch reaching out to 28 States and 6 Union Territories of India in 12 languages + English

भारत के एक ज्ञानमूलक अर्थव्यवस्था बनाने में Education 1st का योगदान



Education 1st का योगदान

भारत के एक ज्ञानमूलक अर्थव्यवस्था बनाने में Education 1st का योगदान

இந்தியாவை அறிவுக் கருவூலம் ஆக்க Education 1st



இந்தியாவை அறிவுக் கருவூலம் ஆக்க Education 1st

ভারতকে জ্ঞানভিত্তিক অর্থব্যবস্থায় পরিণত করার একটি Education 1st উদ্যোগ



ভারতকে জ্ঞানভিত্তিক অর্থব্যবস্থায় পরিণত করার একটি Education 1st উদ্যোগ

भारतने ज्ञानसमेत अर्थतंत्र Education 1st



भारतने ज्ञानसमेत अर्थतंत्र Education 1st

ഇന്ത്യയിലെ വിജ്ഞാന സമ്പദ്‌വ്യവസ്ഥയ്ക്ക് Education 1st ന്റെ സംഭാവന



ഇന്ത്യയിലെ വിജ്ഞാന സമ്പദ്‌വ്യവസ്ഥയ്ക്ക് Education 1st ന്റെ സംഭാവന

INDIA, knowledge economy an Education 1st initiative



INDIA, knowledge economy an Education 1st initiative

भारतासाठी एक ज्ञान-केंद्री योजना India 1st



भारतासाठी एक ज्ञान-केंद्री योजना India 1st

ଭାରତକୁ ଏକ ଜ୍ଞାନ-କେନ୍ଦ୍ରିକ ଅର୍ଥବ୍ୟବସ୍ଥାରେ ପରିଣତ କରିବା Education 1st



ଭାରତକୁ ଏକ ଜ୍ଞାନ-କେନ୍ଦ୍ରିକ ଅର୍ଥବ୍ୟବସ୍ଥାରେ ପରିଣତ କରିବା Education 1st

ಭಾರತದಲ್ಲಿ ವಿಜ್ಞಾನ ಅರ್ಥವ್ಯವಸ್ಥೆ Education 1st



ಭಾರತದಲ್ಲಿ ವಿಜ್ಞಾನ ಅರ್ಥವ್ಯವಸ್ಥೆ Education 1st

ভারতকে জ্ঞানভিত্তিক অর্থব্যবস্থায় পরিণত Education 1st



ভারতকে জ্ঞানভিত্তিক অর্থব্যবস্থায় পরিণত Education 1st

ಭಾರತದ ಜ್ಞಾನ ಅರ್ಥವ್ಯವಸ್ಥೆ Education 1st



ಭಾರತದ ಜ್ಞಾನ ಅರ್ಥವ್ಯವಸ್ಥೆ Education 1st

هندوستان کو یک علم‌محور اقتصاد تبدیل Education 1st



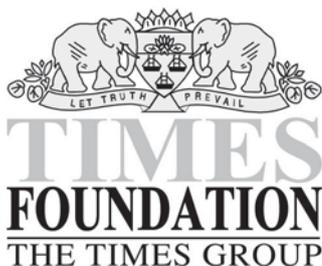
هندوستان کو یک علم‌محور اقتصاد تبدیل Education 1st

Transforming INDIA

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

By
Krishan Khanna

Supported By



Printed in India by Sheetal Prints, 211, Pragati Industrial Estate, Dr. N. M. Joshi Marg, Lower Parel East, Mumbai - 400 011.

Published in India by Manifest Publications, 308, Olympus, Altamount Road, Mumbai - 400 026, INDIA.

Copyright ©Krishan Khanna 2012

First Published in India in 1993

ISBN 978-81-906621-0-9

Transforming INDIA was first published by *i Watch* in 1993 and subsequently it was revised and enlarged every year till the present edition. See details on page 8 of this book. 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

Printed in India by Sheetal Prints, 211, Pragati Industrial Estate, Dr. N. M. Joshi Marg, Lower Parel East, Mumbai - 400 011.

Published in India by Manifest Publications, 308, Olympus, Altamount Road, Mumbai - 400 026, INDIA.

Copyright and Reproduction

All content in this book, such as text, graphics, logos, images, data compilation are the property of *i Watch*, as well as other information providers. This book or any part thereof should not be reproduced, duplicated, published, circulated or exploited. No part of this book can be transmitted in any form or by any means, mechanical or electronic, without the prior permission and written consent of *i Watch*.

Transforming INDIA

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

1. **This is a book and not a magazine.** Especially formatted to look like a magazine for easy reading. Very few wish to read a 200 page book!
2. This book and this work are meant for the Youth of INDIA and the 460 million people who work in the MSME's and for those men and women who are working for the **empowerment of the youth** and especially **women and the girl child.**
3. To understand and appreciate the context of this book, **page7** needs to be read first as this page **is the essence of this effort.**
4. History of evolution of this book, **page 8**
5. Immortal Inspiration, **page 9**
6. A Citizen's effort **page 10**
7. Aim of this book, **page 10**

The above pages 7, 8, 9 and 10 are suggested reading before you get into the main sections of the book

Contents

Contents	2
Foreword	4
Sustaining Economic Growth	7
History of evolution of this book	8
Immortal Inspiration	9
A Citizen's effort & Aim of this book	10
What can we do for you?	11
<i>i Watch</i> Focus areas	12
Citizen's response to <i>i Watch</i>	14
About <i>i Watch</i>	16
Principles, Mission, Goals	18

Section 1 Governance

The INDIA you may not know	19
Agenda for Transforming India	21
Economic & business reforms	23
Governance & Administration	24
Country of INDIA	25
Good governance can transform India into a superpower	26
Good governance + Effective Administration = Zero Corruption	27
World class requires hard work	28
How to achieve world class efficiency?	31
Three Questions for the world Leaders	33

Section 2 Education & Human Resource Development

Tale of three countries after 1947	34
The importance of education	35
Learn to read and write any Indian language in 40 - 60 hours	36
Vocational education & training, VET - the winner!	37
Enterprise Skills Development, ESD & Vocational Education, VET	39
'Education Matrix' of INDIA	41
Make India an international hub for higher & technical education	43
Making INDIA a Knowledge Economy	44
The population bomb that must be diffused	47
Paradox INDIA	49
Three Proposals for Empowering the youth	51
Youth Counseling – Who am I?	52

Section 3 Economy & Enterprise

Difference between Poor & Rich	56
The real & virtual India	57
Poverty Line & related data	58
How to plan for World Markets? A checklist	59
MSME's - Backbone of any economy	61
India must become an International Hub for business	63
GDP analysis of the Economy - Importance of SME's	65
China - India comparison chart.....Catch me if you can?	66
World, USA, BRIC, Selected Countries	67

Section 4 Employment Generation

Importance of Education & Skills	68
HRD - Employment & Unemployment	69
'Employment Matrix' of India	70
Employment Generation Thru' SME's	72
Categories of MSME's, US-SBA classification	73
Employment Generation Thru' VET	75
Classification of Vocational Education & Training, VET courses	76
Implementation of VET for Employment Generation	79
Definitions used in the area of Education & VET	82
Vocational Training, VET & Economy in China	83
Vocational Training, VET & Economy in Germany (EU)	84
Vocational Training, VET & Economy in USA	85
Vocational Training, VET & Economy in India	86
India's labour productivity	87
Relevant Education and Training	88
Agriculture: Advantage India	90

General

General Information	91
References	92
<i>i Watch</i> in national committees	93
Abbreviations used in this book	94
<i>i Watch</i> publications available in 13 languages	95
Action Plan for GDP growth rate of 10% to 15% per year	96
<i>i Watch</i> Projects Planned for 2012 – 2013	97
Sponsors	98
About the Author	100

Foreword

This presentation has been structured for the benefit of the citizens of India, eg., politicians, farmers, officials, professionals, teachers, students, scholars, doctors, businessmen, housewives, engineers, lawyers, consultants, NRI's, PIO's and the youth of India.

This is a book and not a magazine! It has the easy and friendly style for comfort reading. Most of the articles are in one or two pages. Very few articles are in three pages.

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 four sections. The bottom of each page classifies each type of article. The interconnection of these themes is highlighted whenever relevant.

Section 1 covers articles on **governance**.

Section 2 covers articles on education and **human resource development**.

Section 3 covers articles in the selected areas of **economy & enterprise**.

Section 4 covers articles in the domain of **employment generation**.

This book is meant for anyone who may have studied upto class 8th and beyond.

As hardly 7% of all Indians really understand English, this book is also available in all major Indian languages such as Marathi, Gujarati, Urdu, Hindi, Tamil, Telugu, Kannada, Malayalam, Oriya, Bengali, Assamese and Punjabi.

The matter furnished herein has been updated to take into account current available data, wherever possible.

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.

If you ask me a pointed question about the five most important areas where we need to concentrate for bringing the maximum benefit to the people of India, I would say education, education, education, governance and primary healthcare.

The **first 'education'** stands for functional literacy and pre-primary, primary, secondary education. The 'Right to Education Bill' was introduced in parliament only in 2005 and passed in 2009. Thank God that after 63 years of Independence we realize the need for education!

The **second 'education'** stands for vocational education and training (VET) and skills building. The importance of VET has finally been recognized at the level of the Prime Minister who had directed a Task Force in November 2006 to draw out milestones for uplifting our young Indians into productive employment by empowerment and training.

In the 11th plan period the **National Skills Council** and the **National Skills Development Corporation** have been setup in 2009. The Government of India has planned additional 1500 ITI's/ITC's and 50,000 skill centers in the 11th plan. The work on modernizing the existing 5,500 ITI's is also in full swing.

The **third 'education'** stands for complete decontrol and deregulation of all forms of medical, higher and technical education. This alone can generate innovation, excellence and make us World Class.

We have had reservations in steel, cement, cars, scooters, etc. Only increased capacity and free markets have solved the issues of price, quality and availability. **'Licence Raj'** in all forms of education especially in higher, medical and technical education must go!

Education as an enterprise is nearly five times bigger than I.T. and software. It is therefore a much bigger employment generator than software and I.T.

The reader will have to look elsewhere for data and solutions in the area of **primary healthcare**.

Good Governance has been highlighted by giving a number of examples of bad governance and the negative effects therefrom. It is difficult in a democracy to have good governance until the electorate has been empowered with relevant education. Hence the emphasis on relevant education.

It has taken our country **59** years after independence and a lot of discussion and debate to recognize the true potential of micro and small medium enterprises (**MSMEs**). The bill on MSMEs was passed only in 2006. Probably 80% of our GDP is here!

99.7% of organizations in this world, including India, are MSME's. This is the true 'dynamo' and 'heartbeat' of any nation. Out of a workforce of 490 million people, only 6% is the 'organized sector' and the balance 460 million or 94% is the 'unorganized sector'. It is estimated that the total number of MSME's are 100 million. 80% in agriculture and plantations and the balance 20% in service and manufacturing sectors.

The importance of Vocational education & training or VET and MSME's for employment generation has been highlighted and explained. As per the latest CII – BCG – Prof. C. K. Prahlad Project **India@75**, the Nation requires 500 million world class skilled people and 200 million world class graduate by 2022.

The history of evolution of this book has been dramatic, please see page number **8** for details.

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
August 2012

Disclaimer

The information mentioned in this book has been collected from various sources in India and outside, during the last 20 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 on page 92.

For the latest data and information the reader is advised to see the current websites and handbooks as mentioned on page 92.

Dear Reader,

Welcome to *i Watch*. Based on the feedback from readers, we suggest that the following pages may be read first :-

1. Page 12Focus of this book
2. Page 14Citizens response to *i Watch*
3. Page 21Agenda for Transforming INDIA
4. Page 34Tale of 3 countries
5. Page 47The Population Bomb
6. Page 56Difference between Poor & Rich
7. Page 59How to plan for World Markets?
8. Page 61MSME's - Backbone of any economy
9. Page 66China - India comparison
10. Page 75Employment generation through VET
11. Page 87India's Labour Productivity
12. Page 90Agriculture: Advantage INDIA
13. Page 93*i Watch* in National Committees

Sustaining Economic Growth Through Relevant Education & Vocational Training

The above theme needs to be continued forever, as far as India is concerned.

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.

I was invited in October 2007 by the Ministry of Education, 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 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\$ 23,823 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 current.

Where should we as a Nation be by 2022? Or in the year of our 75th Independence or **India@75**? The Confederation of India Industry or **CII** along with 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 us as a Nation to 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 2022.

More information about education, economy, governance and employment generation in India available at www.wakeupcall.org or in our book titled '**Transforming INDIA** by empowerment of the people of India through relevant education & vocational training'.

History of evolution of this book

In 1993 we started with a 4 page booklet.

In 1997 it grew to 8 pages, which were also translated into 10 Indian languages.

In 1999 the book had expanded to 16 pages, in 2001 to 24 pages, in 2002 to 28 pages, in 2004 to 32 pages, in 2005 to 36 pages, in 2006 to 48 pages and in January 2007 to 56 pages.

In July 2008 the book was further expanded to 88 pages and in January 2009 was further expanded to 92 pages and in October 2009 to 96 pages.

In February 2011 it was expanded to 100 pages.

The current August 2012 edition is finally expanded to 104 pages.

This book '**Transforming INDIA**' is available in English and 12 Indian language, viz., Assamese, Bengali, Gujarati, Hindi, Kannada, Malayalam, Marathi, Oriya, Punjabi, Tamil, Telugu and Urdu.

The focus has always been in the same four areas:

- 1 **Governance** *India 1st*
- 2 **Education and Human Resource Development** *Education 1st*
- 3 **Economy and Enterprise** *Economy 1st*
- 4 **Employment Generation** *Employment 1st*

i Watch has four divisions, namely *India 1st*, *Education 1st*, *Economy 1st* and *Employment 1st*, as mentioned above. The first three subjects have ten, twelve and nine articles each while the fourth has sixteen, a total of forty seven notes and observations.

To assist the reader, the bottem of each page mentions the classification of the text, in one of the above four categories.

Where it does not fit any of the four above, we have classified the same under '**General**' category.



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.

A Citizen's effort

A citizen, an IIT engineer's effort at starting and giving momentum for **Transforming INDIA** through relevant education, vocational training and human empowerment.

All of us have a duty, many realize and many don't.

What is important is a clear understanding of what we need to focus on.

The rest follows.....

A non-political, non-religious, non-sectoral effort where the only mission is to bring about awakening of the people and then alone can they decide and understand the latent potential of the People of India; what we missed out on and the importance of this work.

There is much more to India than we typically may think.

This work is only a seed; the growth will come through many hands, of which yours is also one.

Aim of this book

The biggest challenge is to impart relevant education in the form of 100% functional literacy, vocational education and training and to expand multifold, the existing infrastructure of all forms of pre-primary, primary, secondary, higher, medical and technical education and make India an international hub for education, like it used to be.

India needs to empower its youth with relevant education and training as soon as possible.

The average age of an Indian is **26** years

Priority number one is the **education and empowerment of the girl child and women.**

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 95. We request you to look at the inside cover page to note that this book of 104 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 7% of the Indian population.

2. Interactive Workshops

We conduct interactive workshops in the following topics as detailed on page 91. '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 & the Youth

Kindly see the projects 1 and 2 as detailed on page 97 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 92 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 & 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, Tourism, Education and setting up centres in all parts of India. Details on request.

i Watch Focus areas

Education

We work on this issue because...

1. Drop-out rate between KG to Class 10+2 is 87% to 93%, 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. 50,000 crores or US\$10 to \$12 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 153,000 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.
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 \$ 295 billion for India vs US\$ 2199 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.

Governance

We work on this issue because...

1. Rs.3,600 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?

Economy

We work on this issue because...

1. Labour Laws do not allow level playing field for Indian organizations within present Global Economy.
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 66 years. SEZ's need to grow faster.
4. Infrastructure is very inadequate for 1,210 million people. Lot of talk but very little implementation.

<1 billion = 1000 million> < 1 million = 10 lacs> <1 crore = 100 lacs = 10 million> <1 US\$ = Rs. 50 (approx)>

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 SME'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.
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!

Employment Generation

We work on this issue because...

1. India has 43 million registered unemployed and probably another 260 million who are under-employed 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 8500 centres covering about 400 vocations. The actual expenses in VET are more but data is not available!
7. Most of the SME's are in the unorganized sector. SME's are the real 'Dynamo' of the economy. Dovetailing SME'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 contries like Switzerland & Austria there are 5000 VET centers each only for a polulation of 8 million each! These contries are land locked and have no mineral wealth or energyi but because of high quality human resorseas 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. 50 (approx)>

Citizens 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 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

About *i Watch*

- 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, Member of Parliament, Lok Sabha

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 104 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.

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 & Employment Generation**
2. **Governance & administration** of India
3. **Policy changes** regarding, SSI, MSME and relevant labour laws
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:-

1. Interactive workshops, seminars & articles
2. Publications, *Making INDIA a Knowledge Economy, The INDIA you may not know and Action Plan for INDIA*
3. 102 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 **SME's** and understanding the limited relevance of **SSI's**.

The only constant in life is change

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**.

In the last 20 years we have distributed more than 600,000 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 7% 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 **SME'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 1210 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!

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% to 92% drop out rate** of children between **kindergarten** and **10+2**. This includes those who have never been to school.
4. **10%** 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 37,000 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 66 years of Independence and hardly 2% to 2.5% 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 50,000 or more private I.T. training centers spread across the country.
9. **I.T. & Software** are only 2.0% to 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, **1%** are government jobs, **2%** are in the 'organized sector' and the balance **97%** in the 'unorganized sector'.
12. **Out of our 490 million** workforce, **94 %** work in the 'unorganized sector' and about **6%** 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.50) 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.100) 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 (1.21 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 7%** of all Indians understand English, yet most of the websites of the government of India, state governments and public institutions are in the English language!
24. While English is a language used in countries which account for about 38% 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 SME's should be encouraged. **SSI's are 5% of the Indian GDP. 99.7%** of all organizations in the world are SME's. **70% to 80% of the Indian GDP are SME's**. We need to understand the meaning of 'E' in **MSME** (small and medium enterprises).
30. As per www.loksatta.org, about **Rs. 3,200 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. 3,200 crore per day.

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. 50 (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 90% 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 upto 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 SME'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**', ten on **Governance** and twelve on **Human Resource Development** and Sixteen 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.*

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 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 102 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 47 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 7% of Indian understand English, therefore Indian languages are required.

Economic and business reforms

After 66 years of Independence, where are we?

After 66 years of Independence, if we benchmark 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 1,210 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 98.2% of the world's buying power and 99.0% 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 1,210 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.3,200 crore per day or Rs. 1,168,000 crore per year, both on capital and revenue accounts.

About 1.87% of Indians govern 1,210 million people! This comes to about US\$ 234 billion or nearly 14% 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 **A1** priority, as it affects all the 1,210 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"

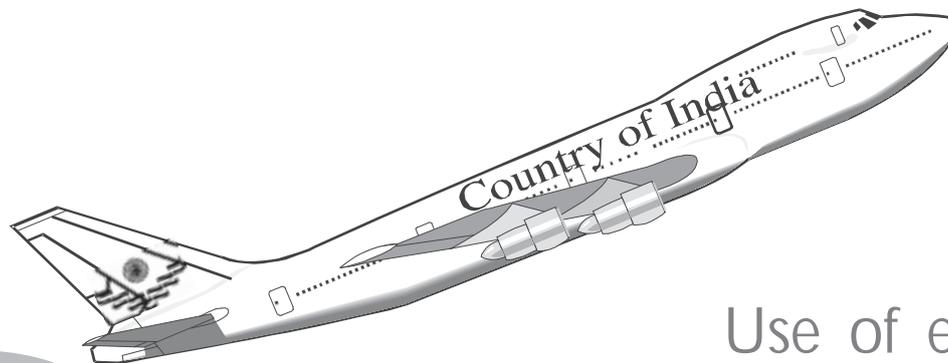
A. P. J. ABDUL KALAM

"In the last 66 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 untill the balance 900 million people of India benefit, the country will not move ahead as a developed nation."

i Watch

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 1,210 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 1,210 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
1,210 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!

Good governance can transform India into a Superpower

1. Where is India in the year 2012?

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 2012:



These are the ground realities in 2012!

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. 1,210 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.**

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 2012, 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?

good governance +
effective administration
= Zero Corruption

10. How can we become World Class? What do we, as citizens, need to do?
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).

3. 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?
9. Why do Indians succeed better in foreign countries?
10. How can we become World Class? What do we, as citizens, need to do?
11. Use of Effective Human Capital. The **Golden Key** which only can transform India into a Superpower!

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 2012, 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 1.210 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 66 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 1.0% of the world's trade and 1.72% 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 1%.
- 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!
- China has 15 million births per year, India has 25 million! Life expectancy in China is 75 years vs 67 for India!

Loss due to poor governance

4. Poor governance & ineffective administration

In the last 66 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?
- 7,000 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? In DVB 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 66 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 66 years of Independence there are only 55 million tax assesseees, most of them from the organized sector. About
- 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 92,000 above Rs. 10 lacs per year!
- India is the 2nd. largest producer of vegetables in the world, 75 million tons per year and fruits 53 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 40,000 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 1,000,000 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. 50 (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

Solutions for good governance

Constitutions 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. 50 (approx)>

How to achieve world class efficiency? One-PointAction Plan for India



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 2012, a period of 66 years!

1210 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 www.loksatta.org, Rs. 3200 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.

The 19 million employees of the union and state governments need to be of a world class standards & extremely effective. 1210 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.

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

<1 billion = 1000 million> < 1 million = 10 lacs> <1 crore = 100 lacs = 10 million> <1 US\$ = Rs. 50 (approx)>

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!

Implement accountability

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 1210 million People of India.

3 Questions we need to ask World Leaders

The 3 questions below was a result of a 2-day Global Summit on **Social Business** hosted by Nobel Laureate Prof. Yunus in Vienna, November 2011. 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 66 years to the least developed countries of Latin America, Africa, ME 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 bea **Paradise**.

Please do give us your feedback and comments? Our Foundation work's with many **Social Organizations**.



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	1,210	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.,

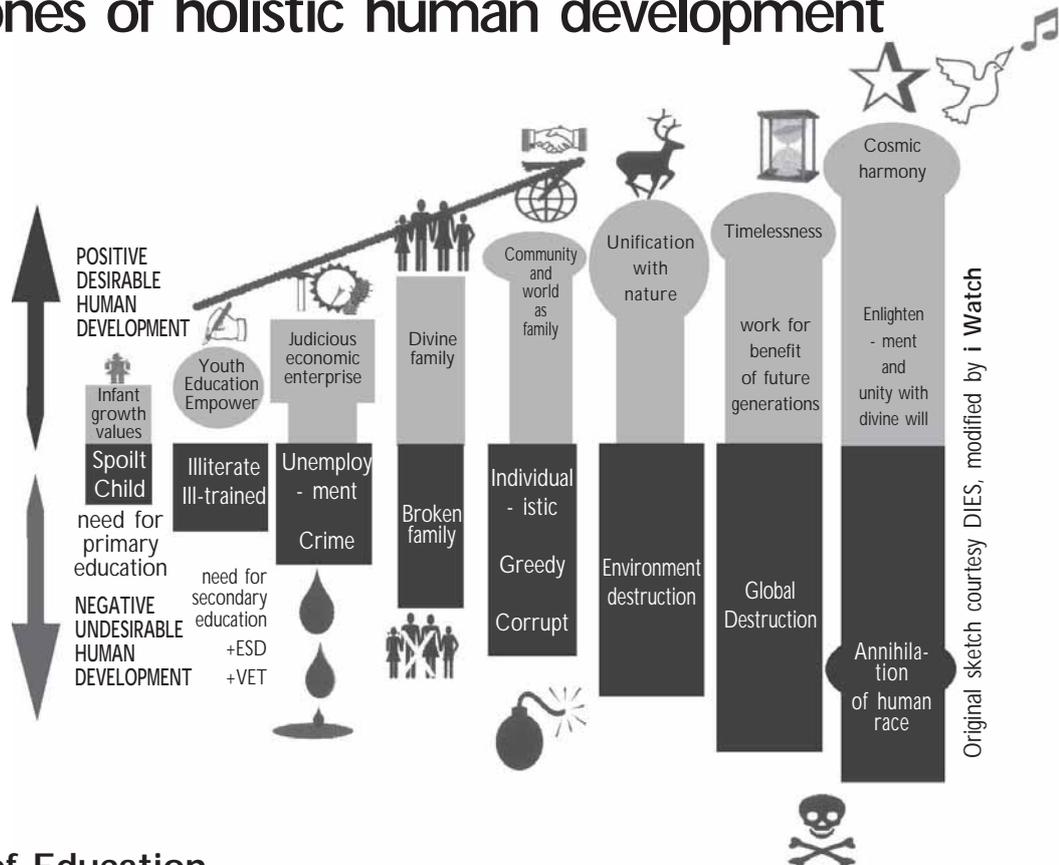
Lexus, Toyota, Honda, Mercedes, Audi, Porsche and the BMW! Unlike India, Japan and Germany do not have vast assets of mineral wealth, availability of energy in the form of coal, oil and gas. They do not have a temperate and sunny climate like we have.

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.

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 ENVOIRNMENT.
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 **entrepreneurship 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 dropouts.
- In India, only 6% of the workforce is in the organized sector and 94% 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.

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 66 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.

Vocational education & training VET is the winner!

1. India in 2012

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 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 66 years of India's independence.
- Kindly see details on pages 75 to 78.

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

- **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 **SME** sector. Out of a work force of 490 million people, nearly 94% work in the **unorganized sector**. The greatest advantage to India Inc. will be if our **SME & 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 66 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.

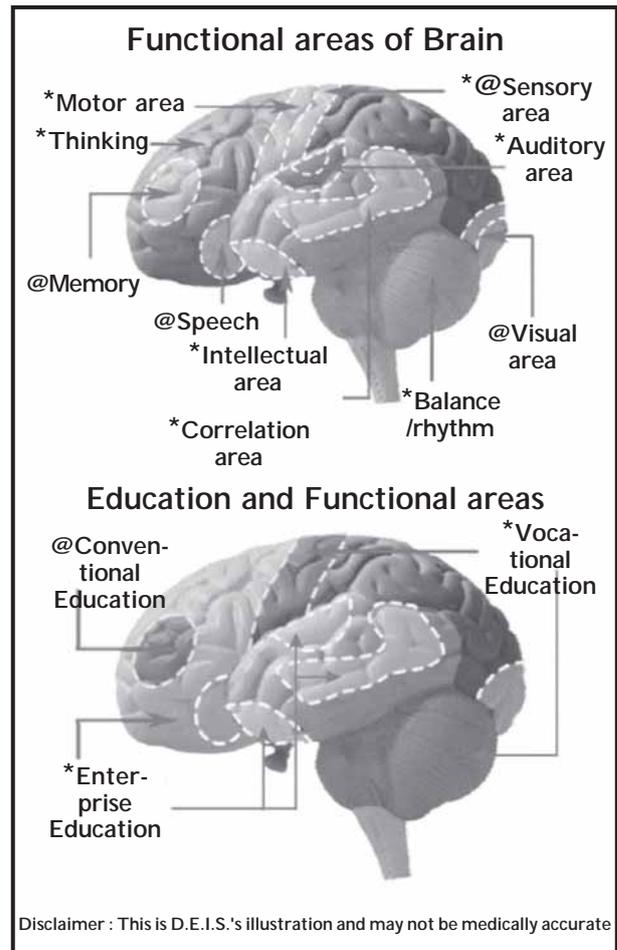
Kindly see details in the sketch shown below.

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 = 10 lacs = 10 million> <1 US\$ = Rs. 50 (approx)>

Education matrix of India

Preamble

1. Rs 55,000 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 3,000 crore is the yearly budget of the University Grants Commission, UGC, in New Delhi.
3. Rs 16,000 crore* per year is spent by nearly 800,000 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 66 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 1 to the Class 10+2, is nearly 88% to 92% in India. (Includes those who do not attend school) The present system is designed ONLY for the balance 10%. **How are the balance 90%, 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 = 10 lacs = 10 million> <1 US\$ = Rs. 50 (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 160,000 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 = 10 lacs = 10 million> <1 US\$ = Rs. 50 (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 210m) 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 160,000 Indian students to leave India every year for foreign universities resulting in a foreign outflow of about Rs.55,000 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. 20,000 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!

Making INDIA a knowledge economy

It is necessary to first understand the entire 'Matrix' in education. Even after 66 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% to 92%.
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 **A1 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 **10% 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 Minimum Program**" for "**education and training of manpower**" in India. In most developed and developing countries the **Chambers of Commerce**

<1 billion = 1000 million> <1 million = 10 lacs> <1 crore = 10 lacs = 10 million> <1 US\$ = Rs. 50 (approx)>

(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 800,000 applications (who spend nearly **Rs.2.00 lac** each for pre-coaching, amounting to **Rs.16,000 crores** per year, for 10,000 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 **9445** 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 150,000 to 160,000 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\$ 11 billion per year or nearly Rs. 55,000 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 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!

<1 billion = 1000 million> <1 million = 10 lacs> <1 crore = 10 lacs = 10 million> <1 US\$ = Rs. 50 (approx)>

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.**
See 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 125,000 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!

The population BOMB

that must be diffused

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

India has 1,210 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 2012?

In the last century, India's population has increased from 250 million to 1,210 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, the poor men, women and children of India have to bear exploitation in all spheres of their daily lives.

Education will stabilize population

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 66 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 = 10 lacs = 10 million> <1 US\$ = Rs. 50 (approx)>

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 10 to 15% 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 9445 **ITI's and ITC's**, which are under the Ministry of Labor & Employment, where 2,100,000 people are trained 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 100% 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 7,000 members and an additional 25,000 members through affiliations of different trade and business groups as affiliate members.
9. Where the **100,000,000 MSME's** accounted for who account for nearly 460 million workforce of the 'Unorganized Sector' and represent nearly 94% 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 125,000 **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 10% who do manage to cross the 10+2 stage enter the 37,000 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 160,000 students per **for higher overseas education**. This puts a drain of nearly Rs. 55,000 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 66 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 100-page book** in A4 size titled - **Transforming INDIA**, for some data, ideas and suggestions. We have 10 articles on Education & HRD and 16 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 & 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 125,000 higher secondary schools and 37,000 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 & 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 **HR 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 **9,000** 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 6% to 7% 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 95 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 93 that we are involved in Macro Reforms at the Centre in the field of education and skills. Projects planned during 2012-2013 are explained on page 97.

2. For Classroom Education — e-Class for class 1 to class 10 for schools

e-Class is for normal class-room type of teaching and **uses only TV's**, no PC, no keyboard, no mouse, no CD and no keyboard required. For example, cost of course-ware, training and installation per school is about Rs. 60,000 (US\$ 1200) per year for all subjects from class 1 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'

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 40 per day or Rs 15,000 (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

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?

Youth - Brain Storming

..... Who am I?

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

Youth - How to prepare your CV?

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

111... Awards and Honors

JJJ... Experience

KKK... Employment History

LLL...Travel experience

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 35 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	1210 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 its 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

<1 billion = 1000 million> <1 million = 10 lacs> <1 crore = 10 lacs = 10 million> <1 US\$ = Rs. 50 (approx)>

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 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. 4,000 crores
- N.A not applicable
- **estimated figure

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. 1500 Rs. 3,000
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 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 = 10 lacs = 10 million> <1 US\$ = Rs. 50 (approx)>

How to plan for world markets?

A Checklist!

Export or perish should be our 'battle cry'. India has only 2.2% of world trade (China + HK 11.0%), 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.

Exports will push organizations to improve quality, 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 is 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 (BIS), 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 and Kolkata have an International Exhibition and Convention Centre. **Already 66 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 38%!

Our fixation, that only English is enough is wrong and is therefore hurting our foreign trade growth.

300 years ago
India had
more than 30%
of world trade.

Today it is
less than 2.2%

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.*

See www.sba.gov/size, for details.

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

In **Germany**, see www.ifm-bonn.org.

MSME's normally means organizations with an annual turnover of up to E 40 million and/or with a maximum number of 500 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 SME'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

<1 billion = 1000 million> <1 million = 10 lacs> <1 crore = 10 lacs = 10 million> <1 US\$ = Rs. 50 (approx)>

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!

MSME's in USA, Japan, Taiwan, Europe, S.E. Asia, Brazil, China, etc., means enterprises with about Rs. 150 to Rs. 250 Crores turnover and about Rs. 80 to 100 Crores investment.

MSME's are the Dynamic Sector of any Nation.

They were also MSMEs once

– GE, IBM, Microsoft, Reliance Industries, Hero Cycles, Infosys...

*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 decontrol 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?

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 **SME'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 SSI 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 SSI'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]. **SSI'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.

<1 billion = 1000 million> <1 million = 10 lacs> <1 crore = 10 lacs = 10 million> <1 US\$ = Rs. 50 (approx)>

- 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!

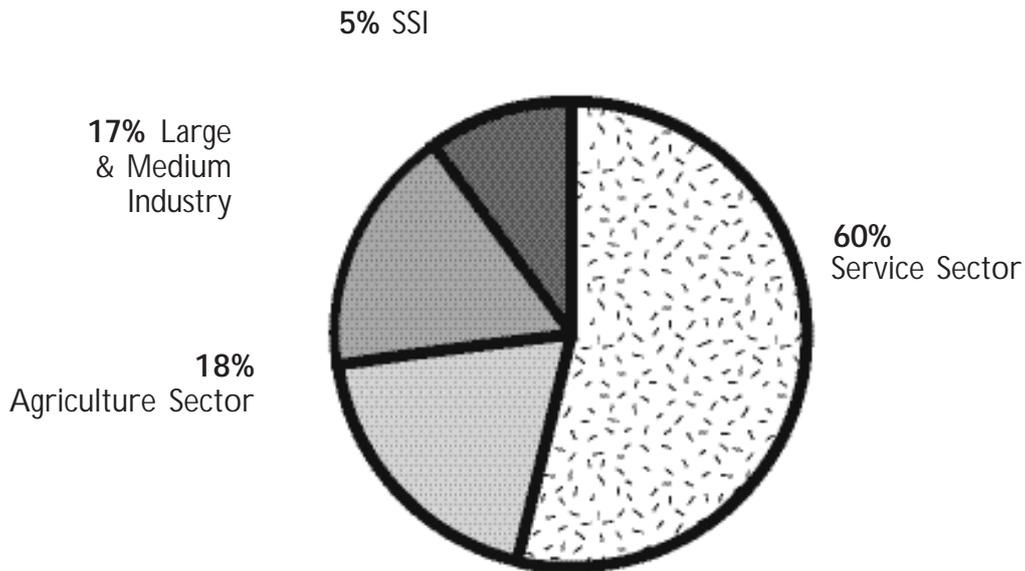
If we take PPP, China's GDP is \$11.29 trillion & India's GDP is \$4.63 trillion

<1 billion = 1000 million> <1 million = 10 lacs> <1 crore = 10 lacs = 10 million> <1 US\$ = Rs. 50 (approx)>

GDP analysis of the Indian economy

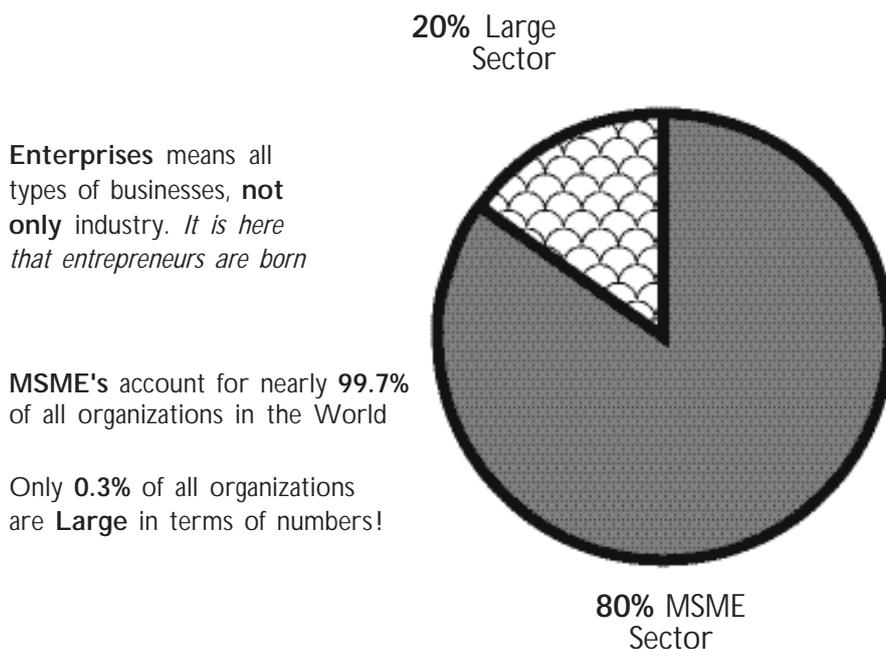
1. GDP break-up of the Indian economy

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!**

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	8 - 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	749
25. External debt (Excluding Hong kong & Macau)	US\$ billions	697	267
26. Exports (Excluding Hong kong & Macau)	US\$ billions/year	1,898	298
27. Imports (Excluding Hong kong & Macau)	US\$ billions/year	1,743	451
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	295
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. 50 (approx)>

World - USA, BRIC, EU & Asia

Economic comparison of selected countries

COUNTRY	LAND AREA SQ KM '000	GDP US\$ BILLION	POP MILLION	GDP PER CAPITAL US\$/YR '000	IMPORT US\$ BILLION	EXPORT US\$ BILLION	LIFE EXPECTANCY YEARS	LITERACY % OF POP	TEL LINES LAND + MOBILE MILLIONS	ROADS KM '000 PAVED	LABOUR FORCE MILLIONS
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

- * The **BRIC** countries as per the Study of **Goldman Sachs** are - **Brazil, Russia, India & China**
- The above table compares nearly 19 countries against some basic parameters as mentioned at the top of the table.
- 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.
- The tables on pages 66 and 67 are ready recknors for people in India to know where we are in 2012 and where we need to go. As per PPP **Indian GDP is \$4.63 trillion** and **China is \$11.29 trillion**.
- 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. 50 (approx)>

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 49 and 50 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 88 and 89 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 75 to 78.

Details at our website at www.wakeupcall.org or in our 102 page book, '**Transforming INDIA** through empowerment of human capital through education & skills building'. The one you are reading now.

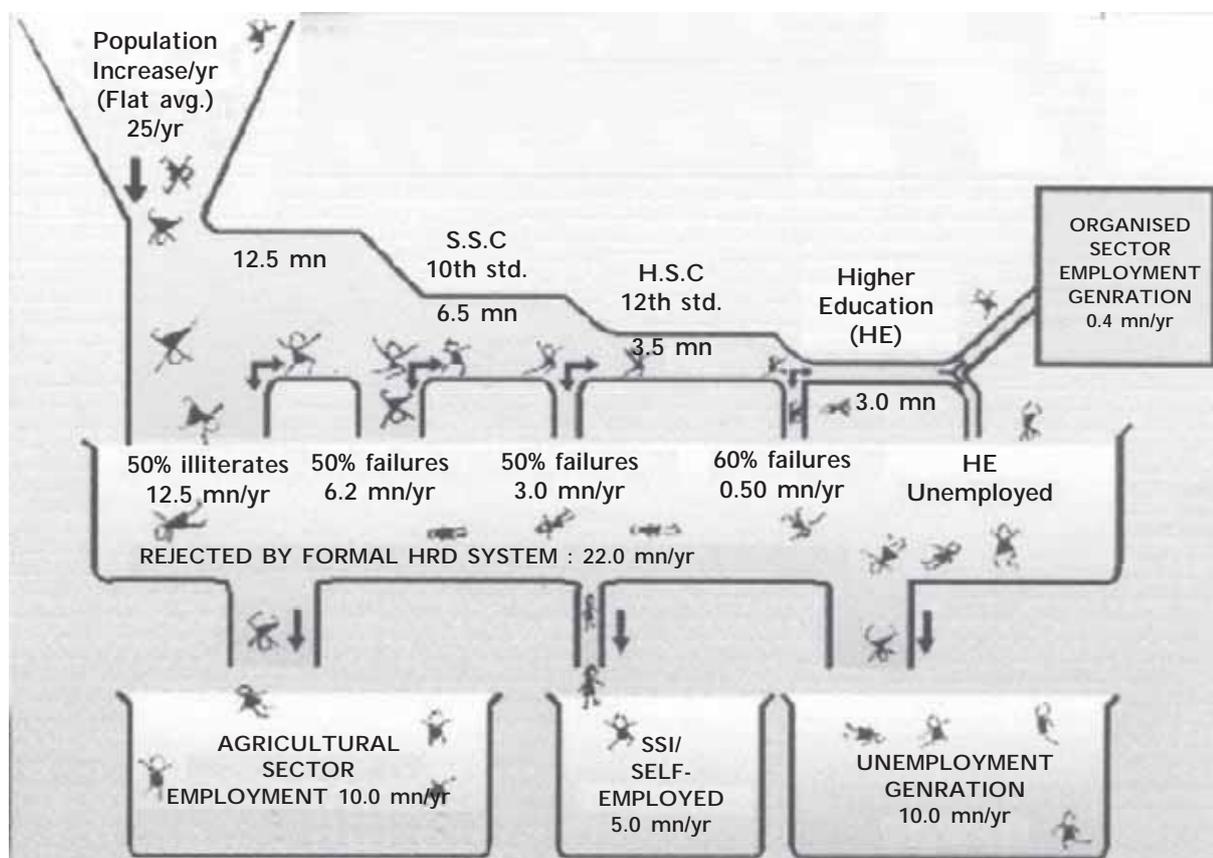
See www.wakeupcall.org for more details.

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.

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 Class 1st and Class 12th is about 88% to 92%.
- Vocation 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 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)
- 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

'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 1210 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.
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

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

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 3600 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. 1,500 to Rs. 3,000 per month
20. An average Indian earns about US\$ 1,530 per year or Rs. 6,375 per month
21. The existing Employee Laws protect employees who normally earn Rs. 5,000 to Rs. 1,000,000 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 2012.
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 2012 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 1000 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

<1 billion = 1000 million> < 1 million = 10 lacs> <1 crore = 100 lacs = 10 million> <1 US\$ = Rs. 50 (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 **SME's** of the developed and developing countries? Only a closer realignment with them will help.

For **SME'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** about Rs. 150 to Rs. 250 crore turnover and about Rs. 80 to 100 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 SMEs.

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.

Categories of MSMEs

US - 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}

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 sub-divided 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 9445 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.
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.

Information on these is not properly catalogued.

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

Classification of 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) {1}
- 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 66 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 1210 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 22 major Indian languages such as Hindi, Urdu, Punjabi, Assamese, Bengali, Oriya, Gujarati, Marathi, Tamil, Telugu, Kannada and Malayalam, etc

English is only understood by 6% to 7% 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 showcasing 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, Unemployment, 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 **94%**. 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.smallbusinessseurope.org and www.esba-europe.org for EU countries for the definition and importance of SMEs.

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. 50 (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. 50 (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. 50 (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 **1,210 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. 50 (approx)>

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.

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 9500 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 workforce** 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.
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. **94% 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 102 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.
2. India has nearly **100 million MSME's** where nearly 94% of the workforce is located!

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 RWH 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.

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. 2,000, 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 66 and website at www.wakeupcall.org.

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 founders, advisors, friends & well wishers of *i Watch*

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 who are working in India on issues similar to those of *i Watch*.

Copyright and reproduction

All content in this book, such as text, graphics, logos, images, data compilation are the property of *i Watch*, as well as other information providers. This book or any part thereof should not be reproduced, duplicated, published, circulated or exploited. No Part of this book can be transmitted in any form or by any means, mechanical or electronic without the prior permission and written consent of *i Watch*.

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

i Watch

211, Olympus
Altamount Road
Mumbai 400 026, India.
krishan@wakeupcall.org
www.wakeupcall.org
TEL +91 22 2353 5466
Cell +91 9821140756

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.indiangos.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 - 2010-2011*, Published by the Tata Services Ltd.
- *Business Today*, dated 28 April, 2002. A large number of issues between 1996 to 2012
- *Business World*, dated 10 June, 2002. A large number of issues between 1997 to 2012
- *Business India*, dated 22 July 2002. A large number of issues between 1996 to 2012
- *The Economic Times, The Financial Express, 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 2012

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 & i Watch in National Committees from 2005 to 2012

1. **Prime Minister's Task Force** - Skills Building for Employment Generation, Planning Commission, New Delhi
2. **Planning Commission**, New Delhi - 11th Plan working Group on Secondary Education & Vocational Education
3. **Ministry of HRD**, New Delhi - 11th Plan working Group on Secondary Education & Vocational Education
4. **IGNOU**, Min of HRD, New Delhi - 11th Plan Working Group on distance education
5. **PHDCC&I**, New Delhi - Co-Chairman - Committee on Education & Industry Co-operation
6. **CII**, New Delhi - Chairman of Task Force on Vocational Education & Training and Member National Committee on Education
7. **FICCI**, New Delhi - Member National Committee on Education
8. **ASSOCHAM**, New Delhi - Co-Chairman Expert Committee on Education
9. **EPSI**, Educational Promotion Society of India, New Delhi - Chairman - Vocational Education & Training Committee
10. **Parliamentary Committee** on Industry and Labour, New Delhi - Invitee
11. **Rotary International**, Rotary District 3140, Bombay Mid Town, Bombay, Director - Vocational Services
12. **AICTE**, All India Council for Technical Education, Min. of HRD, New Delhi - Member of the Governing Board on Vocational Education
13. **Times Foundation**, New Delhi - Hon. Advisor - Vocational Education & Training
14. **National Knowledge Commission**, NKC, New Delhi. Informal exchange of notes and thought process
15. **Ministry of Labour & Employment**, New Delhi. Informal exchange of notes and thought process
16. **Prime Minister's Secretariat**, New Delhi. Informal exchange of notes and thought process
17. **National Manufacturing Competitiveness Council**, NMCC, New Delhi. Informal exchange of notes and thought process
18. **National Institute for Open Schooling**, NIOS, New Delhi. Informal exchange of notes and thought process
19. **Ministry of I.T & Communications**, New Delhi, HRD Division, e-infrastructure & e-learning - Expert Committee Member
20. **Board of Advisors - Education World**, The Human Development Magazine, Bangalore

Abbreviations used in this book

GOI	Government of India
MOF	Ministry of Finance
RBI	Reserve Bank of India
WB	World Bank
FDI	Foreign Direct Investment
SSI	Small Scale Industry
SME	Small Medium Enterprise
NGO	Non-Government Organization
NRI	Non Resident Indian
NRC	Non Resident Chinese
PIO	Person of Indian Origin
Rs.	Indian rupees
LACS	Indian measure of value, 1 lac = 1,00,000
GDP	Gross Domestic Product
MHRD	Ministry of Human Resource Development
H&TE	Higher & Technical Education
VET	Vocational Education & Training
ESD	Enterprise Skills Education
P&SE	Primary & secondary education
SEZ	Special Economic Zone
VRS	Voluntary retirement scheme
SQ	Spiritual Quotient
EQ	Emotional Quotient
IQ	Intelligence Quotient
PPP	Purchasing Power Parity
MP	Member of Parliament
MLA	Member Legislative Assembly
CRORES	Indian measure of value, 1 crore 1,00,00,000
CII	Confederation of Indian Industries
FICCI	Federation of Indian Chambers of Commerce
IMC	Indian Merchant's Chamber
BCC&I	Maharashtra Economic Development Corporation
ASSOCHAM	Associated Chambers of Commerce
PHDCC&I	PHD Chamber of Commerce & Industry

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 7% 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. 200 per copy in India. For other countries, please see outside of back cover of the book for details. For bulk publishing of 5000 copies and more, upto 50% discount will be given. All payments in advance by cheque in favour of *i Watch*.

For language editions of the book, a minimum print run of 1000 copies requires a donation of Rs. 200,000 per print in any Indian language for free delivery within India. to take care all administration and other costs. For large volume processing of 5000 copies and more, 50% discount will be given. See page 97 for other details. Sponsors will be allowed an extra 4 pages at the end of this book to write about them selves and also issue a message to their readers.

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 100 gsm art paper, in size 8.5" x 11". The minimum print run is 4,000 copies per publication per language.

Donations of Rs. 15,000 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.

i Watch

211, Olympus
Altamount Road
Mumbai 400 026 / India

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. SSI is only 5% 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.

Therefore, I.T. and software is NOT everything!

We need to understand the importance of the balance 95 % of the economic activity!

Here are some examples of other sectors of the world economy, only six other sectors have been considered.

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 = 10 lacs = 10 million> <1 US\$ = Rs. 50 (approx)>

i Watch Projects planned for 2012-13

PROJECT No.1

Creating Awareness

Publication in 12 Indian languages

Publishing of 1,000 copies of our 104-page book will require about Rs. 2 Lac per language (this includes cost of translation, art work, paper and printing in each language. Sponser will get 2 pages to write about thmselves).

The book contains 47 articles in the areas of

1. **Employment Generation**
2. **Education & HRD**
3. **Economy & Enterprise**
4. **Governance**

Impact of implementing Project No.1

Only 6% to 7% Indians understand English.

If we have to reach the people of India, it will be necessary to communicate with the bottom 93% of the population first and not only with the top 7% 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 93% 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 37,000 colleges and 125,000 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, 125,000 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% to 92%.**

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 2% to 4% 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!

i Watch 211 Olympus, Altamount Road, Mumbai 400026.

Tel +91 22 2353 5466 Fax +91 22 2353 6782

Email: krishan@wakeupcall.org Website: www.wakeupcall.org

Donations are accepted from Domestic sources. Cheques must only be in the name of "*i Watch*", and sent at above address.

About Eclass

- *Eclass* is chapter-wise audio-visual, animated content in a PEN DRIVE that runs on TV through a small multi media player called *Ebox*.
- It is an innovative educational content for the students of Maharashtra State Board's 1st to 10th standards for all subjects (except languages) in English, Marathi and Semi English medium.
- *Eclass* contains each subject with a real teacher in a virtual classroom, teaching chapter by chapter making studies as exciting as watching movies along with unique features like question answer and mind map for revision purpose.
- *Eclass* can also be easily loaded onto PCs, Laptops, School Servers etc.
- *Eclass* is a unique content which is meant for all, whether you are a student, parent, teacher, school, coaching institute, corporate, NGO or even a young educated youth in rural and semi urban areas of India.

Benefits of Eclass

- *Eclass* provides immense benefits to students as they can educate & empower themselves through a very unique syllabus based learning system enabling them to understand each subject thoroughly rather than mugging up.
- *Eclass* is also helpful to solve the growing problem of non availability of teachers. Secondly, it helps teachers to explain difficult topic easily by providing stimulating animated visuals and thus helps students to develop higher degree of understanding and retention of what they have learnt.
- *Eclass* makes education simple, easy, enjoyable and completely stress-free process. This psychologically helps students improve their success ratio substantially and encouraging them to pursue their studies till the end without dropping out halfway.

Vision of Eclass Equivalent Education for All



Lead the Change, Call Now On : 022-61163030
Or log on to www.e-class.in, www.eclassonline.in



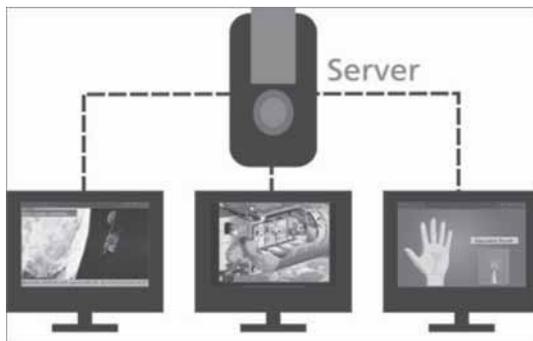
T.V

Eclass pen drive is attached to Ebox and content can be directly viewed on T.V.



Computer and Laptop

Eclass pen drive is directly attached to computer to watch the content.



Server System

Eclass can be installed in schools through screen system or Lan System. Eclass can also be used in computer labs.



Projector-Screen

Eclass content can be also be viewed on projector directly through Ebox.

Online Learning Portal : www.eclassonline.in



- Log on to our website and learn online at your own pace & time.
- Attractive Packages as per your need.
- Free demo package for all standards on registration.
- Social networking with educational content.
- Add your friends, share projects, talent zone, mcq, articles and much more.
- Next generation e-learning portal with notes and mind map and many more features.
- E-classonline – Empowering the nation through online education.

Lead the Change, Call Now On : 022-61163030
Or log on to www.e-class.in, www.eclassonline.in



Krishan Khanna
Founder & Trustee
of *i Watch*

About the author

The Founder Trustee of *i Watch* Krishan Khanna, is an IIT Kharagpur graduate in Mechanical Engineering.

In 1996 he was the recipient of the National Citizen's Award presented by the Prime Minister of India. In 2007, he was awarded the Rajiv Gandhi Award for Outstanding Proactive Leadership by the friends of South Asian American Community, FOSAAC, Los Angeles, USA. In 2011 he was honoured by Nobel Laureate Prof. Mhd. Yunus and presented a "Social Pioneer Award" at a CSR function at the Taj Mahal Hotel, Mumbai, India. In the June 2012 edition of the Education World, a leading monthly magazine on education, he was

recognized as one of the **50 Leaders** Changing Indian Education.

Krishan Khanna worked for 48 years as a technocrat, out of which, nearly 6 years in Germany and Japan. He has worked in business, management and in the social sector.

He has travelled widely in all the 5 continents and has been involved with fifteen joint ventures and business partnerships with organizations from the USA, Canada, Brazil, UK, Sweden, Germany, Italy, Iran, China, Korea, Taiwan, Singapore, Japan, Australia and India.

In 1992, he left the corporate world, gave up his professional and business career and started on a mission of service which is **Transforming INDIA** and Nation Building.

In order to achieve this goal he floated a not-for-profit foundation called *i Watch*. Operations started in 1992-1993 from his private office in Mumbai, India. The main focus of *i Watch* is **Governance** and **Education** and how it has a direct influence on the **Economy** and **Employment**.

The effort of this work is to present the facts to the citizens of India and also suggest some time proven and simple remedies so as to propel the country to its rightful place on this planet. The focus is to highlight the latent potential of India which will be fully unleashed once the human capital of its people is fully empowered.



Amrut P. Shah
CMD
Sundaram Multi Pap Ltd.

Our Vision

Sundaram Multi Pap Ltd. is a popular paper stationery brand amongst the students and civil society. Amrut Shah, promoter and chairman managing director believes that 'Education is a prerequisite to a Nation's strength' and Sundaram will always support education in all forms. He has been spreading awareness about the advantages of education amongst civil society, the youth and students.

Presence of *i Watch* at National & International Events

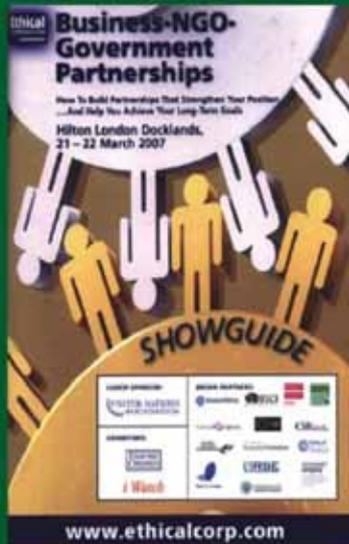


Global HR Forum, Seoul, South Korea

CII-CSR Annual Conference, Chennai, India



NGO Partnership, London, UK



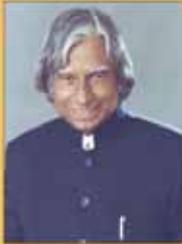
PAN IIT Annual Conventions, Santa Clara, Tokyo, Singapore, Chicago, Chennai, Mumbai, Noida & New York.



Pravasi Bhartiya Divas, New Delhi, India



सत्यमेव जयते



Dr. APJ Abdul Kalam
Former
President of India

Message from Dr APJ Abdul Kalam

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

The focus of "*i Watch*" on governance, education, economics, entrepreneurship & 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 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 planner can all benefit from 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.

- 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
- 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
- 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
- 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 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
- *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
- 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

Per copy charge to cover administration and courier costs for delivery of this book within India, USA, UK, EU and Japan

India Rs 200, USA \$ 10, UK £10, EU Euro 10, Japan ¥1000.

Payment to *i Watch*, Olympus, Altamount Road, Mumbai - 400 026, INDIA.

August 2012 Edition