Denying Basic Human Rights to Citizens of Orissa and Bihar

Compiled by Purna C. Mishra from various published reports

1. Access to Quality Higher Education in Science and Technology is a basic human right

India is a signatory to the "Universal Declaration of Human Rights" (Resolution 217-A III) adopted by the General Assembly of the United Nations on December 10 1948. The Universal Declaration guarantees all citizens of India the right to a quality higher education. The Universal Declaration unequivocally states "*Everyone has the right to education … and higher education shall be equally accessible to all on the basis of merit*". The specific focus on higher education (based on the debate and agreement) was to make available quality higher education. Justice Dr. K. Punnayya in his report on "*UGC Funding of Institutions of Higher Education*" in 1993 reiterated this same sentiment when he stated "*… higher education determines its (India's) economic and technological progress…. Government funding must continue to be an essential and mandatory requirement for support to higher education. The Government/State must continue to accept the major responsibility for funding"*. The Common Minimum Program adopted by the UPA constituents prior to the last parliament election promised to deliver the access to quality higher education to all.

One may wonder why countries and their leaders agreed in 1948 that merit-based access to quality higher education, including quality higher education in science and technology, was a fundamental human right.

The World Development Report (1994), published by the World Bank under the title "*Infrastructure for Development*", rightly states that "*the adequacy of infrastructure helps determine one country's success and another's failure – in diversifying production, expanding trade, coping with population growth, reducing poverty, or improving environmental conditions*". The World Bank realizes that in any modern society, infrastructure plays a pivotal role, often a decisive role, in determining the overall productivity and development of a country's economy and consequently the quality of life of its citizens. The World Bank defined infrastructure as activities that provide society with the services necessary to conduct daily life and to engage in productive activities. Such activities require highly educated citizens. Access to quality higher education in science and technology is a primary catalyst for mastering the skills that are necessary to engaging in these activities and services and to building the right infrastructure.

In the report on "*ECONOMIC REFORMS AND FINANCING HIGHER EDUCATION IN INDIA*", P. Geeta Rani of National Institute of Educational Planning and Administration argued that access to quality higher education in science and technology is a fundamental human right for individuals who must participate in a global economy. According to her "*Knowledge is the driving force in the rapidly changing globalize economy and society. Quantity and quality of highly specialized human resources determine their competence in the global market. Emergence of knowledge as driving factor results in both challenges and opportunities. It is now well recognized that the growth of the global economy has increased opportunities for those countries with good levels of education and vice versa. The benefits of*

globalizations accrue to the countries with highly skilled human capital and it is a curse for the countries without such specialized human capital".

Without access to quality higher education in science and technology, survival in a globalize economy is in peril. Honorable President of India, Dr. A.P.J. Abdul Kalam, echoed this same sentiment in 2004 while discussing the "*Science and Technology Policy 2003*". According to Dr. Kalam "*Today India has become one of the strongest in the world in terms of scientific manpower in capability and maturity. Hence, we are in a position not only to understand the technologies that we may have to borrow, but also to create our own technologies with extensive scientific inputs of indigenous origin. Basically we have come a long way since our independence, from mere buyers of technology to those of who have made science and technology as an important contributor for national development and societal transformation. In a world where the powers are determined by their share of the world's knowledge, reflected by patents, papers and so on, the WTO starts to play a crucial role in the economic development. It is important for India to put all her acts together to become a continuous innovator and creator of science and technology intensive products*". Again, the key according to Dr. Kalam to survival in a globalize knowledge driven economy is access to quality higher education in science and technology.

Honorable Prime Minister of India, Dr. Manmohan Singh, speaking at the same conference as Dr. Kalam went a step further with his statement on need for quality higher education in science and technology in India. According to Dr. Singh "*We take satisfaction from the fact that over 100 global companies have come to India to set up R&D Centers, affirming the intellectual capital of our scientific and engineering community. Science must grapple with the key challenges facing the country today. These include the pressures of increasing population, greater health risks, changing demographics, degraded natural resources, and dwindling farmlands. We need new science and technologies, new priorities and new paradigms to address these fundamental challenges. We in India are practicing new physics and new chemistry to make new materials. These are of direct relevance to the Millennium Development Goals of the United Nations*" Honorable Minister of State for Science and Technology, Mr. Kapil Sibal, while speaking at the same event reiterated the view of the government, country, past administration and post independence policy that making quality higher education in science and technology available to all is key to survival in the global knowledge economy. According to Mr. Sibal, "*Since independence, the government of India has been strongly aware of both needs - the need to build up a powerful science base, and the need to ensure that science is not restricted to the university laboratories. Under a succession of enlightened leaders, Indian governments have long recognized the need for any country that aspires to call itself a modern nation to invest heavily in science and technology. The fruits of this foresight are now widely visible. Thanks largely to the government's determination that the country should build a strong independent base in science and technology, India has been able to build up a capacity in a wide range of areas of modern technology, from software engineering to health biotechnology. And this has placed it in a strong position to engage in the global knowledge economy, rather than remaining on the margins. Science and technology have had unprecedented impact on economic growth and social development. Knowledge has become a source of economic might and power. This has led to increased restrictions on sharing of knowledge, to new norms of intellectual property rights, and to global trade and technology control regimes. Scientific and technological developments*

today also have deep ethical, legal and social implications. There are deep concerns in society about these. The ongoing globalization and the intensely competitive environment have a significant impact on the production and services sectors".

According to the report "*INDIA'S ECONOMY AT THE MIDNIGHT HOUR: Australia's India Strategy*" prepared by the EAST ASIA ANALYTICAL UNIT of Department of Foreign Affairs and Trade, the similar sentiment is echoed by our "*Look East*" partner Australia, whose prime minister had a state visit to India in March 2006. According to the report "… the health of a nation depends on, among other factors, the health of the state of its science & technology. The health of science & technology is measured quantitatively and monitored rigorously by many advanced nations".

The report of the CABE Committee on Financing of Higher and Technical Education compiled by National Institute of Educational Planning and Administration, New Delhi in June 2005 summarizes the importance of access to quality scientific and technological education to improving fundamental human existence. According to the report "*… education is an important investment both from social and individual point of view. Investment in higher education makes a vital contribution to accelerate the process and rate of economic growth, through* ***increasing human productivity****. Higher education is, therefore, regarded crucial to the development of developing countries, and to their ability to compete in the global economy. Higher technical education is one of the* ***most important components of human capital****. This in fact, is seen as 'specialized human capital'. Increasing returns to total factor productivity are due to investment in specialized human capital formed through investment in higher technical and professional education, including science and technology. ….After all, the 1948 Universal Declaration of Human Rights of the United Nations did include* ***higher education as an important human right*** *…*".

In summary,

1. Access to quality higher education is a basic human right.
2. In modern society, infrastructure plays a pivotal role, often a decisive role, in determining the overall productivity and development of a country's economy, as well as the quality of life of its citizens.
3. Quality higher education in science and technology catalyzes the mastery of these activities and services and is critical to building the right infrastructure.
4. Higher scientific and technical education is one of the most important components of human capital.
5. The health of a nation depends significantly upon the state of its science and technology.
6. Investment in higher education makes a vital contribution to accelerate the process and rate of economic growth, through increasing human productivity.
7. Government funding must continue to be an essential and mandatory requirement for support to higher education. The Government/State must continue to accept the major responsibility for funding.
8. The Common Minimum Program adopted by the UPA constituents prior to the last parliament election has promised to deliver the access to quality professional education to all.

2. Need for Consistent and Universal Access to Quality Higher Education in Science and Technology in India

According to the Report of the CABE Committee on Financing of Higher and Technical Education compiled by National Institute of Educational Planning and Administration, New Delhi in June 2005 *"…The strong wave of globalization and trends of internalization of higher education further reinforce the need to develop a strong and vibrant higher education system for two reasons: (a) our institutions of higher education have to become centers of excellence and be internationally competitive. After all, only those societies could reap gains of globalization that have strong and widespread higher education systems, while the countries that have not made much progress in higher education suffered severely. …. (b)* ***Secondly, as inequity-enhancing aspects of globalization are very strong, leading to progressive reduction in social opportunities, it becomes imperative to pay serious attention to improvement of access and equity in higher education. Otherwise, a large number of our young population may get increasingly marginalized during the phases of globalization****. …"*

Further, the CABE committee found by analyzing data out of several regions both in India and abroad that no region has become economically self sustaining if the access to quality higher education is not available and if the enrollment ratio in these quality institutions is less than 20 percent of the college going population. The CABE Committee questions how India can maintain the growth in a post globalize economy because only 8% of Indian students pursue higher education in Science and Technology and the lack of adequate quality centers for higher education creates an obstacle to producing produce better prepared professionals in science and technology.

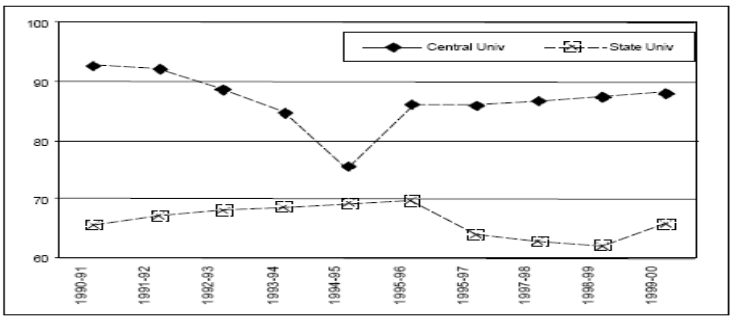
The Government of India has admitted in the *Tenth Five Year Plan*, *"… part of the problem facing universities is the inadequate provision of budgetary resources from the Government"*.

Given inadequate provision of funding from Central Government and the need to establish a few higher quality centers of excellence institutes, the Government of India has established Indian institute of Science, Indian Institutes of Technologies, Indian Institute of Managements, Central Universities, and other centers of excellence such as National Institute of Technologies, Indian Institute of Information Technologies, Indian Statistical Institutes, Indian School of mines, etc across the countries. To bring the higher quality education to the deprived communities of North East, the Government of India has established many centers of excellence in that region.

Looking at the table below, one can see the investments made by the central government in building higher quality institutes to impart quality education in science and technology across India.

Union Government's Expenditure on Technical Education (Rs crores in current prices)				
	1993-94	2001-02	2002-03RE	2003-04BE
Total	405.2	1241.8	1349.1	1544.9
IITs	142.1	517.5	588.0	589.0
IIMs	17.5	102.4	72.2	74.7
IISc	51.6	100.0	110.0	99.0
AICTE	2.4	108.6	120.0	130.0
RECs	72.5	139.7	190.1	216.7
Others	119.1	273.7	268.7	435.5
Source: *Analysis of Budgeted Expenditure on Education* (various years)				

The question that needs to be asked is about the level of funding that is available to other universities or institutions from the Central Government. The graph below shows the funding level to Central vs. State universities from the central Government. Clearly once can see that while the Central Government still meets close to 90% of the budget for the Central Universities, the funding from state and Central Government only meets 65% of the budget for the state universities.



Declining Share of Government Grants in Recurring Income in Central and State Universities

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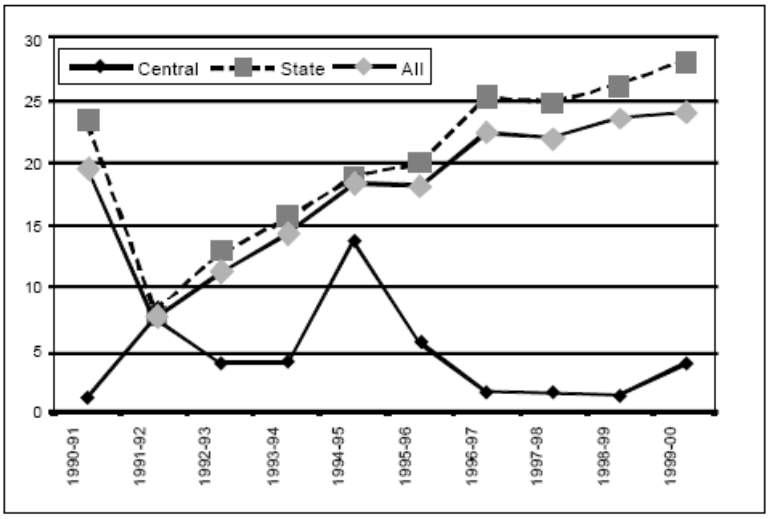
The graph below shows that to meet the discrepancy between budget and funding, the fee a state university must charge the students has gone up to meet the gap of 35% between operating expense and funding from state and central governments.



Share of fee Income in Recurring Income in All Universities

The "India Science Report" released by the Central Government in March 2005 vividly describes the lack of quality in science and technology education and research in the country and warns that unless the Government addresses key challenges quality will further detoriate in the coming years. The report is highly critical of the lack of quality in state universities. The CABE committee has inferred correctly that lack of adequate funding and shrinking funding from the governmental agencies for these state universities is key to lack of quality education and research in state universities.

In summary:

1. India has fewer centers of excellence than necessary to compete in global economy.
2. These Centers of Excellence are all funded by the Central Government.
3. Most of the State Universities and state supported institutions do not have funding to offer a quality education and train students to compete in global economy.
4. Because of the higher fee structure (examination fee), the average to lower quality education at state universities costs more than higher quality education at a Central Government funded institutes/universities.
5. Consistent and universal access to quality higher education in Science and Technology is not available in India (based on "India Science Report" and CABE Committee). Because most of the centers for excellence (or Institutes of National Importance) are under the respective state governments the admission to these institutes are typically based on state level examinations and not available to students from other states.

3. Regional Disparity in Central Government Funding for Providing Quality Higher Education in Science and Technology

According to the report "*REGIONAL GROWTH AND DISPARITY IN INDIA: A COMPARISON OF PRE AND POST-REFORM DECADES*" by Mr. B. B. Bhattacharya and

Mr. Sakthivel, *"The regional disparity in India is now a matter of serious concern. …..One of the reasons why centralized planning was advocated earlier was that it could restrain the regional disparity. In spite of planning, however, the regional disparity remained a serious problem in India. …."*.

According to the CABE committee report, "….*Quality and equity dimensions of higher education also needs serious attention.* ***Despite some improvement in equity over the decades, higher education is still not accessible to the poorest groups of the population. Inter-regional variations in quality, quantity, and equity dimensions of higher education are marked. 'Empowerment of higher education as Shri A.P.J. Kalam, President of India observed, is the critical need of the hour. Higher education needs to be empowered, as it, and it alone, helps in sustainable social, economic and political development of the society and some assurance of equity".***

When Prime Minister Dr. Singh released 'India Science Report' relating to science and technology status report of the country, he pointed out the regional imbalance in terms of education institutions in different States. He hoped that the Government at the Centre and the States will take note of findings of India Science Report and evolve a policy to remedy these regional imbalances.

According to the report "*INDIA'S ECONOMY AT THE MIDNIGHT HOUR: Australia's India Strategy*" prepared by the EAST ASIA ANALYTICAL UNIT of Department of Foreign Affairs and Trade, "…*Unfortunately, such quantification of scientific progress has not been done systematically in India*".

In summary

1. Serious regional disparity exists in funding for creating centers of excellence Higher Education in India.
2. Empowerment of higher education, as President of India has observed, is the critical need of the hour.
3. Prime Minister of India advocates evolution of a policy to remedy the regional imbalances.
4. The key decision makers of the country, i.e., the president and the prime minister, recognize that the regional disparity in India is now a matter of serious concern.

4. Which are these Deprived States?

The following table shows the human deprivation index for all the states of India based on data collected and tabulated in 2001.

No	States/UT	Poverty line	Illiteracy	Deprivation Index	Rank
1	Andhra Pradesh	15.77	38.89	40.21	9
2	Arunachal Pradesh	33.47	45.26	40.89	7
3	Assam	36.09	35.72	49.93	5
4	Bihar	42.60	52.47	54.02	3
5	Goa	4.40	17.68	19.35	27
6	Gujarat	14.07	33.57	37.21	12
7	Haryana	8.74	31.41	36.38	16
8	Himachal Pradesh	7.63	24.09	31.90	18
9	Jammu & Kashmir	3.48	45.54	31.34	19
10	Karnataka	20.04	32.96	36.99	13
11	Kerala	12.72	9.08	12.59	30
12	Madhya Pradesh	37.43	35.92	56.77	2
13	Maharastra	25.02	28.73	34.24	17
14	Manipur	28.54	31.13	28.21	21
15	Meghalaya	33.87	36.69	40.85	8
16	Mizoram	19.47	11.51	17.98	29
17	Nagaland	32.67	32.89	N/A	N/A
18	Orissa	47.15	36.39	60.50	1
19	Punjab	6.16	30.05	30.06	20
20	Rajasthan	15.28	38.97	45.74	6
21	Sikkim	36.55	30.32	39.61	10
22	Tamil Nadu	21.12	26.58	23.54	23
23	Tripura	34.44	29.36	36.59	15
24	Uttar Pradesh	31.15	42.64	52.92	4
25	West Bengal	27.02	30.78	36.92	14
26	Andaman & Nicobar	20.99	18.81	23.06	24
27	Chandigarh	5.75	18.24	18.65	28
28	Dadra & Nagar Haveli	17.14	39.97	39.36	11
29	Daman & Diu	4.44	18.91	N/A	N/A
30	Delhi	8.23	18.18	25.80	22
31	Lakshadeep	15.60	12.48	19.36	26
32	Pondicherry	21.67	18.51	20.39	25
33	India	26.10	34.80	43.96	

Data for Jharkhand, Chhatisgarh, and Uttaranchal are included in Bihar, Madhya Pradesh, and Uttar Pradesh. Based on the data collected in 2001, the five most deprived states are Orissa, Madhya Pradesh, Bihar, Uttar Pradesh, and Assam. Based on the poverty index alone, the five poorest states are Orissa, Bihar, Madhya Pradesh, Sikkim, and Assam.

We have calculated an index to measure the regional disparity in terms of investments in building centers of excellence for higher education across the states of India. The "*Funding Disparity Index*" for a state is the ratio of percentage of funding provided by the Central Government to the state for maintaining centers of higher education divided by the percentage in terms of population. Assuming at a

macro level, the index with a value of 1 is right level of funding, greater than 1 is more funding than normal and less than 1 is less funding. Since it should be 1 across the country, any state with an index greater than 1 creates regional disparity with a state with the index less than 1.

Data for Chandigarh is included with Punjab and Haryana. We have not included data for some of the union territories and North Eastern States as we do not have reliable data for some of the union territories and investment in North Eastern states have been made only for last few years. The data are approximate.

No	States/UT	Deprivation Index	Central Government Funds in 2005 to maintain the Centers of Excellence in Higher Education (approximate) in Crores	Per Capita Funding	Funding Disparity Index	Funding Disparity Index Rank
1	Andhra Pradesh	40.21	124.6	16.05	0.86	10
2	Assam	49.93	214.0	77.72	4.19	17
3	Bihar	54.02	58.99	5.41	0.29	4
4	Gujarat	37.21	25.63	4.87	0.26	3
5	Haryana	36.38	18.85	8.52	0.46	7
6	Himachal Pradesh	31.90	21.18	33.76	1.82	16
7	Jammu & Kashmir	31.34	15.38	14.51	0.78	9
8	Karnataka	36.99	136.63	25.13	1.35	14
9	Kerala	12.59	25.63	7.90	0.43	5
10	Madhya Pradesh	56.77	67.99	8.50	0.46	6
11	Maharastra	34.24	172.04	17.09	0.92	11
12	Orissa	60.50	15.68	4.15	0.22	2
13	Punjab	30.06	33.55	13.34	0.72	8
14	Rajasthan	45.74	15.38	2.59	0.14	1
15	Tamil Nadu	23.54	112.77	17.79	0.96	12
16	Uttar Pradesh	52.92	382.93	21.24	1.10	13
17	West Bengal	36.92	232.71	28.10	1.51	15
18	Delhi	25.80	262.83	177.12	9.54	18

Based on the "*Funding Disparity Index*", the Central Government has made the least investment in Rajasthan, Orissa, Gujarat, Bihar, and Kerala in establishing centers of excellence in higher education. Based on the "*Funding Disparity Index"* and *"Deprivation Index",* Orissa and Bihar are the two states where the Central Government has made the least investments in infrastructure and no doubt Orissa and Bihar are the two poorest states of India.

In Summary,

1. Funding disparity creates and maintains regional imbalances and disparity in the field of higher education.
2. At a macro level, poverty and lack of growth of Orissa and Bihar are influenced by the lack of investments made by the Central Government in proportion to the investments made in other states.
3. The Central Government has consistently denied Orissa and Bihar their rights to have a quality higher education.
4. The regional imbalance or disparity in the field of higher education, noted by the President and Prime Minister, has affected Orissa and Bihar more than any other states.
5. Orissa and Bihar are the two states where the Central Government has made the least investments in infrastructure and Orissa and Bihar are the two poorest states of India.

5. Is the Regional Imbalance or Disparity Shrinking?

During the NDA regime, the Central Government decided to create the Indian Institute of Information Technology to impart quality education in the field of information technology. The three centrally funded IIIT are in Allahabad (Uttar Pradesh), Gwallior (Madhya Pradesh), and Jabalpur (Madhya Pradesh). In terms of "*Funding Disparity Index"*, Madhya Pradesh is 6th and Uttar Pradesh is 13th.

During the NDA regime, the government had established committee under Dr. S. K. Joshi to recommend the next IITs, which by all internal norms are the very best institutes in India. The original list includes Institute of Technology, Benaras Hindu University, Varanasi (Uttar Pradesh), Punjab Engineering College, Chandigarh (Punjab), Government Engineering College, Thiruvanthapuram (Kerala), NIT-Suratkal (Karnataka), and a brand-new IIT to be set up in Besar (Andhra Pradesh). In terms of "*Funding Disparity Index"*, Kerala is 5th, Punjab is 8th, Andhra Pradesh is 10th, Uttar Pradesh is 13th, and Karnataka is 14th.

When the NDA government was replaced with UPA, the same committee under Dr. S. K. Joshi replaced their original five sites with seven and the list include Institute of Technology, Benaras Hindu University, Varanasi (Uttar Pradesh), University College of Engineering and College of Technology, Osmania University, Hyderabad (Andhra Pradesh), Bengal Engineering College, Howrah (West Bengal), Jadavpur University's Engineering and Technology Departments, Jadavpur (West Bengal), Zakir Hussain College of Engineering and Technology, Aligarh Muslim University, Aligarh (Uttar Pradesh), Andhra University College of Engineering, Vishakhapatnam (Andhra Pradesh), and Cochin University of Science and Technology (CUSAT), Kochi (Kerala). Two more IITs for West Bengal (already have one at Kharagpur), two more IITs for Uttar Pradesh (already have one at Kanpur), two IITs for Andhra Pradesh, and one for Kerala. Again in terms of "*Funding Disparity Index"*, Kerala is 5th, Andhra Pradesh is 10th, Uttar Pradesh is 13th, and West Bengal is 15th.

Only three colleges out of these seven recommended (IT-BHU, Bengal Engineering College, and Jadavpur University) offer some of the post-graduate and doctorate programs under TEQIP (Technical Education Quality Improvement Program, also known as the QIP program). The four remaining colleges do not offer any graduate program under TEQIP. One must question the committee under Dr. Joshi to answer what criteria his committee used to select these seven institutes. Unfortunately, NIT

Rourkela in one of the most deprived states in the country offers some of the post-graduate and doctorate programs under TEQIP and has been ranked higher than many of these seven institutes by various professional societies (e.g., Dataquest, International Data Corporation, and Nasscom).

It is interesting to note that the same committee selected different sites for IITs under two different governments. The role of politics in selecting site needs further analysis and cannot be disputed.

In 2006-2007 budget, the UPA Government has allocated Central Universities of Calcutta, Mumbai and Madras a grant of Rs.50 crores each to mark the beginning of their 150th year celebrations, with another Rs.50 crores each to be given at the conclusion of the year; Punjab Agricultural University, Ludhiana to get grant of Rs.100 crores; status of an autonomous National Institute to be accorded to Rajiv Gandhi Centre for Biotechnology, Thiruvanthapuram, Kerala. Again, in terms of "*Funding Disparity Index"*, Kerala is 5th, Punjab is 8th, Maharastra is 11th, and West Bengal is 15th.

In the 2005-2006 budgets, the UPA Government had allocated Indian Institute of Science (IISc), Bangalore an additional grant of Rs.100 crores to make it a world class institute. In terms of "*Funding Disparity Index"*, Karnataka is 14th.

During the NDA government, the Central Government has decided to establish four National Institute of Sciences in Pune (Maharastra), Chennai (Tamil Nadu), Bhubaneswar (Orissa), and Allahabad (Uttar Pradesh). When the NDA government was replaced with UPA, the NIS scheme was repackaged at IISER and the committee under Prof Rao recommended Calcutta and Pune. So the government decided to move a proposed institute from Orissa with "*Funding Disparity Index"* of 2nd to a state where the "*Funding Disparity Index"* is 15th. Later the UPA Government has decided to build a third IISER in Chandigarh. One must ask if the decision to grant a new IISER was recommended by the committee under Prof Rao or was it a political decision.

While the existence of regional imbalance or disparity in the field of higher education is highlighted on the "Indian Science Report" and noted by the President and Prime Minister, it needs explanation how the same leaders agreed to move a proposed institute from Orissa with "*Funding Disparity Index"* of 2nd to a state where the "*Funding Disparity Index"* is 15th.

In summary,

1. Successive governments have paid only lip service to shrink the regional imbalance or disparity in the field of higher education and in fact have actively pursued plans to expand the regional imbalance or disparity in the field of higher education.
2. Over the last two years, the UPA Government has exceeded the previous NDA Government in assigning additional provisions in union budgets to fund more money to the centers of excellence in relatively more advanced states and has actively expanded the regional imbalance and disparity in the field of higher education. It is quite strange that the actions of the leaders of the government are in sharp contrast to the opinions expressed as policy directives.

3. Politics is used to decide the locations for centers of excellence. It is unfortunate that politics has been and still is used to play a major role even in the world of education.

6. Cost of Deprivation for the Deprived States?

The regional disparity or imbalance in the field of higher education has been detrimental to the growth of the deprived states.

Many of the Centers of Excellence in Higher Education (or Institutes of National Importance) are not fully under central government control. For example, most of the faculties of Central University at Calcutta are exclusively recruited from West Bengal. Admissions to the institutions of higher education are often through local level examinations only (Viswa Bharati, Guwahati University, etc.). **Students or professionals from the deprived states do not have many opportunities to benefit from the central universities or other institutes of national importance.**

According to the report "*REGIONAL GROWTH AND DISPARITY IN INDIA:A COMPARISON OF PRE AND POST-REFORM DECADES*" by Mr. B. B. Bhattacharya and Mr. Sakthivel, the growth rate of SDP (State Domestic Product) went down for the states Assam, Bihar, Orissa, Punjab, Rajasthan, and Uttar Pradesh in 1990-2000. Since both Assam and Punjab went through a long period of internal turmoil, there are only three states where the growth rate in of SDP in 1990-2000 is slower than 1980-1990.

State	Deprivation Index	Funding Disparity Index	Growth Rate of SDP in 1980-1990	Growth Rate of per Capita SDP in 1980-1990	Population Growth Rate in 1980-1990	Inflation Rate in 1980-1990
Andhra Pradesh	40.21	0.86	4.81%	2.56%	2.19%	9.75%
Assam	49.93	4.19	3.91%	1.74%	2.14%	10.77%
Bihar	54.02	0.29	5.20%	2.97%	2.16%	8.86%
Gujarat	37.21	0.26	5.71%	3.62%	2.02%	8.09%
Haryana	36.38	0.46	6.68%	4.12%	2.46%	7.07%
Himachal Pradesh	31.9	1.82	6.10%	4.36%	1.82%	6.55%
Karnataka	36.99	1.35	6.10%	4.00%	2.03%	8.39%
Kerala	12.59	0.43	4.50%	3.04%	1.42%	9.30%
Madhya Pradesh	56.77	0.46	5.18%	2.74%	2.38%	9.53%
Maharastra	34.24	0.92	5.85%	3.60%	2.29%	8.10%
Orissa	60.5	0.22	5.14%	3.96%	1.82%	7.47%
Punjab	30.06	0.72	7.17%	3.19%	1.88%	8.30%
Rajasthan	45.74	0.14	7.17%	4.41%	2.64%	8.00%
Tamil Nadu	23.54	0.96	6.35%	4.79%	1.48%	6.91%
Uttar Pradesh	52.92	1.1	5.88%	3.46%	2.33%	8.16%
West Bengal	36.92	1.51	5.20%	2.93%	2.20%	8.21%

State	Deprivation Index	Funding Disparity Index	Growth Rate of SDP in 1990-2000	Growth Rate of per Capita SDP in 1990-2000	Population Growth Rate in 1990-2000	Inflation Rate in 1990-2000
Andhra Pradesh	40.21	0.86	5.12%	3.62%	1.72%	9.18
Assam	49.93	4.19	2.47%	0.65%	2.13%	8.49
Bihar	54.02	0.29	3.46%	1.86%	2.14%	7.77
Gujarat	37.21	0.26	8.28%	6.38%	1.76%	8.09
Haryana	36.38	0.46	6.71%	4.42%	2.19%	8.81
Himachal Pradesh	31.9	1.82	6.91%	5.11%	1.71%	10.88
Karnataka	36.99	1.35	7.07%	5.27%	1.49%	8.43
Kerala	12.59	0.43	6.00%	4.78%	1.35%	10.54
Madhya Pradesh	56.77	0.46	5.45%	3.22%	1.98%	7.75
Maharastra	34.24	0.92	6.80%	5.04%	1.97%	8.65
Orissa	60.5	0.22	3.60%	2.12%	1.81%	9.76
Punjab	30.06	0.72	4.63%	2.71%	1.91%	9.53
Rajasthan	45.74	0.14	6.46%	4.09%	2.06%	8.69
	23.54	0.96	6.65%	5.40%	0.98%	6.89
Uttar Pradesh	52.92	1.1	4.33%	1.98%	1.75%	8.48
West Bengal	36.92	1.51	7.24%	5.41%	1.72%	8.35

It is not coincidence that the two states with the highest deprivation index and the lowest funding disparity index had the largest negative growth rate of SDP in a post liberal economy.

In a controlled centrally planned economy (as in 1980-1990), the growth rate of SDP is based on the government controlled economy (on what one can produce and what one can buy). However as we have reviewed before

1. World Bank aptly suggests that in any modern society, infrastructure plays a pivotal role- often decisive role in determining the overall productivity and development of a country's economy, as well as the quality of life of its citizens.
2. Access to quality higher education in Science and Technology is the primary catalyst for mastering these activities and services and the key to building the right infrastructure.

3. Access to quality higher education in Science and Technology is a key human right for citizens in globalized economies or in post liberalized economies.
4. The health of a nation depends on, among other factors, the health of the state of its science and technology.
5. Investment in higher education makes a vital contribution to accelerate the process and rate of economic growth, through increasing human productivity.
6. Government funding must continue to be an essential and mandatory requirement for support to higher education. The Government/State must continue to accept the major responsibility for funding.
7. The Common Minimum Program adopted by the UPA constituents prior to the last parliament election has promised to deliver the access to quality professional education to all.

In summary,

1. Even in a post liberalized economy, states with a higher funding disparity index have a higher probability to succeed and can have resources to provide a better opportunity to their citizens.
2. A state with a higher funding disparity index (such as Uttar Pradesh) does not guarantee success in a post liberalized economy because politics is used to decide the locations for centers of excellence. **It is unfortunate that politics has been and still is used to play a major role even in the world of education.**
3. In a post liberalized economy, a state with lower funding disparity index has almost no chance to succeed in a market economy.
4. Basic human rights have been denied to the citizens of states with the highest deprivation index and the lowest funding disparity index.
5. The two states with the highest deprivation index and the least funding disparity index are Orissa and Bihar.
6. Basic human rights have been denied to the citizens of Orissa and Bihar.
7. The UPA government agrees that there exists a wide disparity or regional imbalance in the field of higher education in India and yet, has contributed the most to expand the gap to a record highest level.

7. What do the citizens of these most deprived states expect?

While participating on the 2006-2007 budgets in March 2007, Mr. Rahul Gandhi suggested that the future of the country is in jeopardy as there is very little investment in education and the Central Government must invest more in Education to produce productive citizens. We have shown in this report that the most deprived states have almost zero probability to succeed in the post liberal economy. Yet, our finance minister is expecting the economy to grow at least 8% or with the right incentive even up to 10% this year.

Obviously the growth rate of the most deprived states will be around 3-4%. What do the citizens of these most deprives states expect from this imperfect union called "*Mother India*"?

1. Is it necessary to get what they deserve by following the paths taken by the citizens of Assam and other North Eastern States?
2. Should the country and her political leaders practice economic segregation and build two different Indias that would be in conflict with each other?
3. Should the development be clustered and the investments be channeled to even spread the economic disparity?
4. Can India achieve a consistent growth rate of 8-10% on an annualized basis with internal turmoil created by clustering development in few states and denying the basic human rights to the most deprived states?
5. Civil society is the basic norm of a developed society and should our limited vision and clustered growth help build a civil society?
6. There is a saying "A stitch in time saves nine". Do our leaders understand this message before the Naxals or the Maoists in the deprived states take over the control of the most deprived states?

We recommend that the Central Government adopt a similar formula for Orissa and Bihar as it has adopted for the North Eastern States. In the budget, the North Eastern States get 10% under each expense category.

1. The modified Gadgil formula and the Consensus approach has not worked to alleviate the utter poverty in Orissa and Bihar. Orissa and Bihar need to be included with the North Eastern states and the 10% quota need to be increased to at least 20% to bring Orissa and Bihar to mainstream of development.
2. The Central Government must create the new IITs, IIITs, and IIMs in Orissa, Bihar, and Rajasthan.
3. The Central Government needs to allocate additional funding for Higher Education in Science and Technology as recommended in the "*India Science Report*" and CABE Committee.
4. A Significant tax incentive should be offered for private investment in higher education.
5. Politics should not be used to decide the locations for centers of excellence.