Orissa's HRD requests and the rationale behind them.

Preamble: Orissa completely agrees with the X1th plan goal regarding human resources development; aptly described by: "Enhancing access with inclusion and excellence."

Orissa is ready to partner with the central government to take the enrollment in higher education **from its current 6% to 15% by 2012 and 21% by 2017** as envisioned by the GOI/MHRD/Planning Commission; but because of the big gap, as compared to other states, Orissa needs a big helping hand.

Current Status: As per the NSSO study of 2004-2005 (released in October 2006), Table 3.14.1 (of Report 516) shows that in the 15-19 age group 29% people in Orissa are attending school/college and in the 20-24 age group this number for Orissa is 6.1%. (Both numbers are lowest among all but the small states/UTs of Dadra and Nagar Haveli, Daman & Diu and Lakshadweep.) For the Scheduled Tribe population these numbers are 17.1% for the 15-19 age group and 4.1% for the 20-24 age group. Hence, Orissa has a long way to go and needs all the help that it can get.

Following are our requests; with the greenfield IIT being the first priority.

1. **A greenfield IIT**. [Highest priority of the State] (possibly in South Orissa, the most backward district cluster of Orissa and India, yet close to many industries.)

Short Rationale: Orissa is the11th largest state in terms of population and 9th largest in terms of area. As per a recent Indian Express article, Orissa is the top state in India in terms of projects under implementation in June 2007 (as present in the CMIE Capex data base) with a value of Rs. 242918 crores. When calculated in per-capita terms Orissa is second behind Haryana. Quoting that article: "*Orissa is also a major gainer, particularly over the last five years. It went from rank 8 to rank 2 over the last five years. While the Indian average for projects under implementation on a per capita basis grew by 93 per cent, Orissa gained by 381 per cent over the last five years to reach Rs 61,811 of investment per capita.*" These projects under implementation in Orissa, ranging from ports, steel plants, and power plants are all related to technology.

Orissa government's offer: The Orissa government proposes to offer the following towards the establishment of an IIT in Orissa.

  i.   It will offer free land of 500 acres to an IIT and reserve an adjoining 500-1000 acres for the development of a hi-tech research park and a research themed township around the IIT.
  ii. To help in the quick establishment of the IIT, in the initial years (while the IIT campus is under construction) the Orissa government will offer class room, laboratory and hostel facilities at the College of Engineering and Technology (CET) in Bhubaneswar. If necessary, it will contribute towards jointly building additional structures at CET that will be used by the IIT students.

iii. The Orissa government in partnership with Orissa based industries will fund at least 10 chair professors at the IIT for professors involved in research areas that have some impact on Orissa.

iv. The Orissa government will consider the IIT in Orissa as its first choice in terms of technical consultancy.

v. The Orissa government will facilitate collaboration between the various industries in Orissa and the IIT in Orissa.

2. A multi-campus central university in the KBK region:

Short Rationale: Following are some statistics regarding the KBk region. The tribal population percentage of the KBK districts are as follows: 8 KBK districts total 38.72% (+ 16.63 % SC). Malkangiri 58.36% (+19.96% SC), Rayagada 56.04% (+14.28% SC), Nabarangpur 55.27% (+15.09% SC), Koraput 50.67% (+13.41% SC), Nuapada 35.95% (+13.09% SC), Kalahandi 28.88% (+17.01% SC), Sonepur 22.11% (+9.5% SC), Balangir 22.06% (+15.39% SC). Two adjacent districts also have high tribal population. They are Kandhamala 51.51% (+18.21% SC) and Gajapati 47.88% (+8.77% SC).

The literacy rates in the KBK districts are as follows: Overall in 8 KBK districts 36.58% with the female literacy at 24.72%. Malkangiri 31.26%, Nabarangpur 34.26%, Rayagada 35.61%, Koraput 36.2%, Nuapada 42.29%, Kalahandi 46.2%, Balangir 54.93%, Sonepur 64.07%. Two adjacent districts also have low literacy: Gajapati 41.73% and Kandhamala 52.95%.

Under these circumstances, it may not be feasible for a branch campus or two of the proposed Indira Gandhi National Tribal University to adequately cover the vast KBK+ areas of 10 districts.

Thus, we reiterate our earlier demand of a central university in the KBK region. Here, we would like to add that this central university should be multi-campus, with campuses in all the district head quarter towns of KBK+ districts, i.e., the eight KBK districts and the adjacent Gajapati and Kandhamala districts. Moreover, it should be treated like the central universities in the North East in all respects, such as, it must have special quotas for tribal citizens and KBK+ residents and it must have the additional components that will be in the central universities in the north east.

Orissa's offer: Orissa government will take care of the land requirements and initiate partnerships with the various industries in those districts.

3. **Upgradation of Ravenshaw University** (in the Bhubaneswar-Cuttack metropolitan area) **to a world class central university and to be the first university in India which is 100% accessible to disabled persons**.

Rationale: Since India already has 23 central universities (none of these are in Orissa) and the new 30 ones will take the total to 53, and Orissa is the 11th largest state of India in terms of population and 9th largest in terms of area, and among the most backward states

of India, we request that Orissa be granted a second central university. We propose that the second central university in Orissa be an upgradation of the 150 year old Ravenshaw College, now a University. Some of the arguments in favor of Ravenshaw University are as follows:

a. Ravenshaw is a unitary university; like most world class universities such as those in the United States, and like most of the existing central universities in India (such as JNU, BHU etc.), Ravenshaw does not have any affiliated colleges.
b. Ravenshaw is one of the oldest higher education institutions of India with a glorious past. Its alumni are almost the who's who of Orissa.
c. Ravenshaw's location at the heart the millennium city of Cuttack and also in the middle of the Bhubaneswar-Cuttack metropolitan area makes it easy to access, and the presence of top-notch educational and research institutions near it gives Ravenshaw yet stronger potential of becoming a world-class knowledge hub, i.e. a world class central university. (This is mentioned in the PM's address to the planning commission as a criteria about the necessary "eco system" for locating world class central universities.)
d. Ravenshaw is already working on plans for its expansion in directions consistent with the goals of a world class university outlined by the PM.

In this context, we would like to propose that Ravenshaw University be 100% accessible to disabled persons. It will then perhaps become the first university in India with that attribute and me a model to the rest of universities in India. We have an initial plan for this prepared by Dr. Sruti Moahapatra, an activist for disable people, and we are looking at the code used in Singapore for making public places accessible to disable people.

Orissa's offer:

(i) Orissa government will completely handover the existing infrastructure and the current 86.4 acres land holding of Ravenshaw University to the central university.
(ii) Orissa government will provide 150 acres of additional land in a picturesque location in Cuttack for the expansion of Ravenshaw University. This land is close to the current campus of Ravenshaw University; it is also close to the land allocated to the Art of Living Trust for the establishment of Sri Sri University and is also close to the land earmarked for the National School of Law in Cuttack.
(iii) Orissa government will fund 10 Chair professors involved in research areas that relates to Orissa.
(iv) Orissa government will facilitate interaction between various industries in Orissa and the Ravenshaw University and encourage them to together contribute at least another 10 Chair professorships.
(v) Orissa government will establish and partially fund several Orissa specific centers of excellence.

4. Upgradation of University College of Engineering, Burla to a national level institute:

Rationale: UCE Burla is the oldest engineering college in Orissa and in 2004 the Orissa government had sent a detailed proposal for upgrading UCE Burla to a IIT level institute. We reiterate our request and would like to propose that UCE Burla be upgraded to an IIEST or at the least to one of the proposed 10 new NITs.

5. A science magnet school in each district of India, perhaps starting with a few on experimental basis in Orissa.

Rationale: The X1th plan proposes 6000 new high quality schools in the country. Considering that our country has fallen behind in Science and as a feeder to the recently established IISERs, we propose that one of these high schools in each district be a science magnet school. Such schools are present in many states in the United States and graduates from these science magnet schools have significant contribution to science in the United States. See http://www.imsa.edu/ for an example of such a science magnet school and its impact.

Why start with Orissa: Currently the Institute of Mathematics and Applications of Orissa conducts a Rural Math Talent Search Examination and selects students from all over Orissa with an aptitude in mathematics and sciences and gives them few weeks of training. This has had tremendous impact and we believe if these students were educated in a specialized science magnet school, they would contribute significantly to Indian Science. In other words, Orissa already has a mechanism to identify students with aptitude in Science and Matehmatics.

6. Establishment of the Campuses of Indira Gandhi National Tribal University in the Tribal areas of Northwest Orissa:

Rationale: The north western districts of Orissa, quite far from KBK, also have a high tribal population, in particular Mayurbhanj (tribal percentage 57.87%, literacy 52.43%), Sundergarh (50.74%, 65.22%), and Keonjhar (44.52%, 59.75%); and possibly in Sambalpur (35.08% , literacy 67.01%), Deogarh (33.31%, literacy 60.78%), and Jharsuguda (31.88% , literacy 71.47%). We request that the proposed Indira Gandhi National Tribal University have campuses in the above mentioned districts.

7. Establishment of branches of existing and proposed institutions in Orissa:

In particular we request that branches of the following existing institutions be established in Orissa, as this would help in the goal of increasing their capacity by 200%. The particular institutions that are of interest are: (a) a branch of IIM and (b) a branch of a NITTTR. Among the proposed universities we request a branch of the Workers Technical University in Orissa.

For Future: Probably there may not be time and opportunity to bring them up right away.

A. Approval of IIT Kharagpur's proposal to have a branch campus in Bhubaneswar:

Rationale: Consistent with the goal to expand the number of seats in the IITs by 200% IIT Kharagpur had in 2006 proposed to develop a branch campus in Bhubaneswar. The state of Orissa is fully supportive of this proposal and had identified the required land and showed them to the IIT Kharagpur officials. We request that MHRD gives the go ahead to IIT Kharagpur on this plan as it is a win-win way to achieve the 200% increase in seats that is planned for; it achieves MHRDs goals and it helps a neighboring state that desperately needs a top-notch institution.

In this regard, it may be added that Bhubaneswar has about 30+ engineering colleges within an hour of it and to improve the quality of the faculty in these institutions it is imperative that there is a Ph.D granting top-notch institution (like an IIT branch) in the area so that it will make it easier for the faculty in the 30+ engineering colleges to pursue a higher degree and thus contribute to the X1th plan goal of improving the quality of faculty and quality of teaching.

(This can be pushed with the help of IIT Kharagpur director later.)

B. Granting the "funded by UGC" status to all existing universities of Orissa.

This includes the following universities.

- Fakirmohan University, Balasore
- North Orissa University, Takatpur, Mayurbhanj
- Biju Patnaik University of Technology, Rourkela
- Orissa University of Culture, Bhubaneswar

C. Support on several proposed state initiatives that are needed to achieve some of the XIth plan goals:

(i) Establishment of metropolitan universities (or college clusters) by putting together state colleges in metropolitan areas: This matches with the point 6 of the NKC recommendations on Higher Education.

This will achieve the goal of reducing the number of colleges per universities and will help in better utilization of resources across colleges in a metropolitan area, which are usually close to each other. (Moreover, a requirement that faculty can only be transferred within colleges in a cluster will give the faculty a stake in that cluster. Currently an educator in a college does not have much stake in that college as they can be transferred at a moment's notice to another college.)

For example, a Bhubaneswar metropolitan university can be made up of BJB College, RD Women's College, Rajdhani College, etc. Similar universities would also be attempted in Rourkela and several other metropolitan areas of Orissa. We need MHRD pre-approval of such universities so that there is no funding gap during the creation of these universities, as some of these universities will include autonomous colleges which now get UGC funding.

Following are the universities/college-clusters that we propose:
(a) Bhubaneswar University/college-cluster: This metropolitan university/college-cluster can consist of the following government colleges in the Bhubaneswar area.
   a. BJB autonomous College (an autonomous college)
   b. RD Women's autonomous college (an autonomous college)
   c. Rajdhani College
   d. College of Engineering and Technology, Bhubaneswar (??)
   e. Center for IT excellence, Bhubaneswar
   f. Madhusudan Institute of Co-operative Management, Bhubaneswar
   g. Govt. College of Physical Education, Kalinga Stadium, Bhubaneswar
   h. Institute of Mathematics and Applications can be a research center under this university.

(b) Rourkela-Sundergarh University/college-cluster: This University/college-cluster can consist of the following government colleges in the Rourkela area.
   a. Govt. autonomous College, Rourkela
   b. Sushilavati Govt. Women's College Rourkela
   c. Rourkela College, Rourkela
   d. Govt. Women's college, Sundergarh
   e. Govt. College, Sundergarh

(c) Keonjhar metropolitan University/college-cluster: This University/college-cluster can consist of the following government colleges in the Keonjhar area.
   a. Dharandidhar autonomous College, Keonjhar
   b. Govt. Women's college, Keonjhar
   c. BN Sanskrit College
   d. Orissa School of Mines, Keonjhar

(d) Koraput-Jeypore University/college-cluster: This University/college-cluster can consist of the following government colleges in the Koraput-Jeypore area.
   a. Govt. Womens College, Jeypore
   b. Vikram Dev autonomous College, Jeypore
   c. DAV College Koraput.
   d. A newly made engineering college in the area, say in Sunabeda

(e) Cuttack metropolitan university/college-cluster: This University/college-cluster can consist of the following government colleges in the Cuttack area.
   a. Sailabala Women's college,
   b. JKBK College,

    c. IMIT Cuttack
    d. ITT Choudwar.
    e. An engineering college made by upgrading adding degree programs to the Bhubanananda engineering school. (??)

(f) South Orissa University/college-cluster: This University/college-cluster can consist of the following government colleges in the Berhampur and Chhatrapur area.
    a. Khallikote College
    b. Binayak Acharya college, Berhampur
    c. SB Rath Women's autonomous College, Berhampur
    d. Govt. Science College, Chhatrapur.
    e. An engineering college made by adding degree programs to Berhampur Engineering School. (??)

(g) East Orissa University/college-cluster
    a. Dhenkanal autonomous college
    b. Dhenkanal Mahila Mahavidyalaya
    c. Govt. autonomous College, Angul
    d. IGIT, Saranga (??)

(h) Balangir University/college-cluster
    a. Rajendra autonomous College, Balangir
    b. Govt. Women's college, Balangir
    c. Govt. College, Balangir
    d. BB Sanskrit College, Balangir

(i) West Orissa University/college-cluster
    a. GM autonomous College, Sambalpur
    b. Panchayat College, Baragarh
    c. Govt. Women's College, Sambalpur
    d. NSCB College, Sambalpur

(j) Kalahandi University/college-cluster
    a. Govt. autonomous College, Bhawanipatna
    b. Govt. Women's College, Bhawanipatna

(k) Puri University/college-cluster
    a. SCS autonomous College, Puri
    b. Govt. Women's college, Puri

(l) Central Orissa University/college-cluster
    a. SM Govt. Women's College, Phulbani
    b. Govt. autonomous College, Phulbani

(m) Orissa University/Kalinganagar University/college-cluster

a. Bhadrakh Autonomous College, Bhadrakh
b. NC autonomous College, Jajpur
c. Some private colleges from the Kalinganagar area

(n) Remaining Govt. Colleges that could be made part of other universities
a. Niranjan Women's College, Aska (make a const. college of Berhampur U)
b. SKCG autonomous College, Parlakhemundi, Gajapati (make a const. college of Berhampur U)
c. KK Women's College, Balasore (make a const. college of FM Univ.)
d. FM autonomous College, Balasore (make a const. college of FM Univ.)
e. MPC autonomous College, Baripada (make a const. college of NO Univ.)
f. Govt. Women's College, Baripada (make a const. college of NO Univ.)
g. Govt. Sanskrit College, Baripada (make a const. college of NO Univ.)

(ii) Establishment of a Womens university. (Paradeep may be a good place for this.)

(iii) Make sure one government men's college and one government women's college exist in each district. In districts that do not have one or both of these, the best performing private college(s) from that district should be picked. The districts that miss one or both are as follows (we list if those districts have a private autonomous college):
(a) Angul : a government Women's college is needed.
(b) Bargarh: a government Women's college is needed.
(c) Bhadrakh: a government Women's college is needed.
(d) Bouda: both are needed.
(e) Deogarh: both are needed.
(f) Gajapati: a government Women's college is needed.
(g) Jagatsighpur: both are needed. (SVM autonomous College is an existing private college that has autonomous status.)
(h) Jajpur: a government Women's college is needed.
(i) Jharsuguda: both are needed.
(j) Kendrapara: both (Kendrapada autonomous College is an existing private college that has autonomous status.)
(k) Malkangiri: both are needed.
(l) Nabarangpur: both are needed.
(m) Nayagarh: both are needed. (Nayagarh autonomous College is an existing private college that has autonomous status.)
(n) Nuapada: both are needed.
(o) Rayagada: both are needed. (Rayagada Autonomous College is an existing private college that has autonomous status.)
(p) Sonepur: both are needed.
This means twenty seven more government colleges need to be established.

(D) Others:

(i) Substantial scholarships (say Rs 15K/per month) for students pursuing PhD in subjects such as Computer Science. In this regard one may note the Financial Times article

(http://www.orissalinks.com/?p=714) that states that this only India only graduated 35 Ph.Ds in Computer Science, as opposed to 1000 in the United States.

(ii) Technical schools as well as higher level institutions beyond traditional ITI subjects. (Construction; plumbing; etc.)

(iii) In regards to the goal of "strengthening and expanding existing universities and colleges that are located in areas that have GER lower than the national average", we propose that Berhampur University (South Orissa), Sambalpur University (West Orissa), and North Orissa Unibversity (Baripada, Mayurbhanj) be taken under this scheme.

(iv) We request that collateral free educational loans be available to at least all students in govt. engineering colleges in Orissa.

(v) Help in our effort to upgrade OSME Keonjar to ISM Dhanbad standards. (through PPP).

(vi) Establishment of one additional Women's hostel in each of the autonomous colleges and universities in Orissa.