Highlights of Chitta's Contributions to higher education landscape of India

Chitta comes from the state of Odisha in India. Chitta has been mostly involved in the development of the higher education landscape in Odisha, and the higher education landscape of India. Following are some of his major contributions. Since these contributions were not done via publications, or through public documents, they are mostly supported through (mostly accidental) news items and some web documentations. Some of the pointers are currently only accessible via pdf printouts of those pages or through the web archive.

1. BS in Computer Science in general colleges of Odisha, IT Conference series in Odisha and Orissa Information Technology Society:

In 1997 Chitta gave a plan to the government of Odisha to introduce BS in Computer Science in general colleges of Odisha. His idea was accepted by the Odisha state government and quickly implemented. In http://www.oits.org/infrastructure.html he wrote about his proposal and why it is important and useful. This also appears in pages 106-109 of the book http://bit.ly/Chitta-OSA1. Following is an excerpt:

During the Invest Orissa Symposium at Houston in June-July 97, I met several Orissa ministers and bureaucrats. To provide educational opportunities in information technology all through out Orissa -- not just in a selected few places -- I suggested them that colleges offering science degrees in Orissa should offer programs in B.Sc (Hons) in Computer Science. The main importance of such a program is that it could be made available in many more colleges than programs like B.Engg or MCA which by definition can only be in engineering colleges and post graduate colleges, respectively. With positive response from them and from participants at OSA 97, and with feedback from ornet, I sent a written proposal to the Orissa govt. (This proposal is available at http://cs.utep.edu/chitta/orissa/bsc.) When I visited Orissa in Dec 97, I met the additional Chief secretary, Secretary of Education and Secretary of Science and Technology and the Orissa govt took a decision to establish pilot programs in B.Sc (Hons) in Computer Science (together with pass options with other honours choices) in six colleges: B.J.B College, Bhubaneswar; Ravenshaw College, Cuttack; G. M. College, Sambalpur; Khallikote College, Berhempur; R. D. Women's College, Bhubaneswar; and Govt College, Rourkela.

This program is now offered in more than 30 colleges in Odisha (http://samsodisha.gov.in/Degree/DegreeCutoffMarksSF.aspx) in a self-financing mode.

To encourage research in computer science and information technology in his home state, that year (1997) Chitta also co-founded a conference series (initially a national one which after the first year became an international one) on Information

Technology in India and also cofounded the Orissa Information Technology Society. Documentation on this exist at the websites http://www.oits.org/comments97.html, http://www.oits.org/ and https://sites.google.com/site/citconference/. These conferences have been held in 1997, 1998, 1999, 2000, 2002, 2003, 2006, 2007, 2009, 2014, 2015, 2016, 2017, 2018, and 2019.

2. Establishment of National Institute of Science Education and Research in Bhubaneswar, India: During 2005-2006 Chitta led a mass movement in Odisha, India, and among the Odisha diaspora that led to the establishment of the National Institute of Science Education and Research (NISER) in his hometown Bhubaneswar. This institute https://www.niser.ac.in/ is funded by the central government of India. The then Prime Minister of India (Dr. Manmohan Singh) said the following (https://pib.gov.in/newsite/erelcontent.aspx?relid=20345) when announcing the establishment of this institute:

As India moves up the technology ladder and improves its relative competitive status in the global domain, the need for capable innovative scientists will increase. Our higher education programs should empower young science students to engage not only in advanced research but also in domains which facilitate translation of research results into development of new technologies and their commercial deployment. This requires acquisition of necessary experimental skills and familiarity with the realities of practical world.

There is a strong synergy between research and higher education. Co-existence of both leads to higher excellence in both. It provides opportunities for students to be exposed to excitements in scientific research and benefit from teachers who are themselves engaged in expanding the horizons of knowledge. Such participation in teaching also benefits researchers by way of greater clarity of thought and availability of students to broaden support to research activity.

The National Institute of Science Education and Research will facilitate this synergy between research and higher education. ... NISER will be at par with the IISER being established in other places but will operate under the umbrella of DAE. It will undertake integrated 5-year Masters courses in core and emerging branches of science to provide world-class education to students after the 10+2 stage. It can also include an integrated M.Sc.-Ph.D. after graduation level.

The emphasis of education at NISER will be to generate scientific trained manpower of a very high quality which could directly find placement across the country. Greater emphasis will be on branches of science relevant to the Department of Atomic Energy and also catering to the better exploitation and utilization of Orissa's regional natural resources. Orissa's mineral and marine resources will be taken into consideration in designing training programs of students here.

... NISER will be an institute at par with the best in the country in terms of facilities and faculty. It will have a research to teaching load as practiced in the best universities in the world. This will ensure world class education and also attract the best researchers. It will have world-class experimental facilities in all the current and emerging branches of science including physics, chemistry, modern biology and environmental sciences. We will provide enough resources to DAE to convert this into reality within a very short time frame.

In order to attract bright young students to this integrated course, it is proposed to make the course challenging on a world-class level, give reasonable stipend to the students and also allow them time for research activities even during their student days. There will be campus interviews and placements at both research centers and in industry in order to make the course more attractive to the students in the present competitive environment of market forces which drives them to IT-related jobs.

I am told that this project will be quickly completed in two phases. In Phase-I, additional courses will be started immediately in 3 or 4 selected subjects like physics, mathematics, chemistry and biology with existing faculty and new faculty. In Phase-II, 200 acres of land will be acquired around Bhubaneswar and activities expanded on a larger scale. When completed, I am confident that the National Institute of Science Education and Research will become a Mecca for science just as TIFR and IISc are today.

To elaborate on Chitta's role in the establishment of this institute, we first recall some of the salient historical aspects behind the establishment of this institute.

In 2003-2004 The President of India (http://bit.ly/Chitta-NIS1) and the minister of human resource development (HRD) of India http://www.nis.orissalinks.com/vol1/2004-01-xx-ugc.pdf talked about an initiative by the University Grants Commission (UGC) of India (http://www.nis.orissalinks.com/vol1/2003-12-28-president-ugc.pdf) to establish 4 National Institutes of Sciences (NIS) in 4 cities of India: https://www.nis.orissalinks.com/vol1/2003-12-28-president-ugc.pdf) to establish 4 National Institutes of Sciences (NIS) in 4 cities of India: https://www.nis.orissalinks.com/vol1/2003-12-28-president-ugc.pdf) to establish 4 National Institutes of Sciences (NIS) in 4 cities of India: https://www.nis.orissalinks.com/vol1/2003-12-28-president-ugc.pdf) to establish 4 National Institutes of Sciences (NIS) in 4 cities of India: https://www.nis.orissalinks.com/vol1/2003-12-28-president-ugc.pdf) to establish 4 National Institutes of Sciences (NIS) in 4 cities of India: https://www.nis.orissalinks.com/vol1/2003-12-28-president-ugc.pdf) to establish 4 National Institutes of Sciences (NIS) in 4 cities of India: https://www.nis.orissalinks.com/vol1/2003-12-28-president-ugc.pdf) to establish 4 National Institutes of Sciences (NIS) in 4 cities of India:

A new Indian government (of a different party and coalition) took over on 22nd May 2004. In early 2005 there were articles about institutes of science education and research (IISER) in two cities in India: Pune and Kolkata. (Bhubaneswar, Chennai and Allahabad were no longer mentioned.)

During 2005 (which overlapped with his sabbatical) while making a website about his home town (Bhubaneswar) Chitta discovers the above facts and notices that the earlier planned NIS and the currently pursued IISER are very similar.

Dismayed that his home town (Bhubaneswar) is no longer in the Indian government's plan for a science institute, Chitta wrote to his state government and

the members of parliament from his state and then led a movement through letter writing, blogs, newspaper articles, creation and dissemination of documents and booklets and coordination with other activists in ground in India and in the cyberspace, that ultimately culminated in the Indian Prime Minister coming to Bhubaneswar and announcing the establishment of an institute (NISER - described earlier) of the kind that was being demanded. Chitta's crucial role in this and his contributions can be gleaned from (a) his blogs and writings and (b) occasional newspaper reports that explicitly mention his name. Following are some pointers to them.

- http://nis.orissalinks.com/ : This site maintained by Chitta chronicles the issue and has links to 100+ documents and newspaper articles on this issue.
- http://iiser.blogspot.com/ : This is a blog that Chitta created to co-ordinate the mass movement. It has his writings and some important news items.
- Chitta's writings that appear in other blogs:
 - Why an NIS/IISER/IIT should be established in Bhubaneswar? : https://orissamatters.com/2005/10/13/iiser-baral-2/
 - CASE OF NIS: US BASED PROF BARAL WRITES TO PLANNING: https://orissamatters.com/2005/11/01/iiser-baral/
 - Appeal by OSA Educational Activities Committee: http://archive.orissasociety.org/announcement_IIS_BBSR.htm
- Mention of Chitta's name in the media regarding this effort
 - o http://bit.ly/Chitta-NIS2 1: It says "We are not against IISERs in Calcutta and Pune. We just want the Centre to undo the injustice being done to Orissa by not taking away from it an announced and planned for NIS/IISER,? said Chitta Baral of Arizona State University, who is leading a campaign in support of the institute in Bhubaneswar.

In his letter to the Prime Minister and Congress president Sonia Gandhi, Baral wrote that the aim of the NIS that Joshi had announced in 2003 was the same as that of the proposed IISERs. Thus, NIS and IISER, though they differ in their names; as proposed institutions, both refer to the same concept, he said.

Perhaps, the other announced locations Chennai and Allahabad are not as much concerned, but for Bhubaneswar and Orissa, this is a matter of survival as Orissa does not have a central university or an institute of national importance like the Indian Institute of Technology or the Indian Statistical Institute, Baral, who has launched a campaign through e-mail, argued."

http://www.nis.orissalinks.com/vol1/2005-11-22-pioneer-nis.pdf : It says: "However, a recent declaration by the Government overlooked the previous decision, with Prime Minister stating that two Indian Institutes

¹ http://bit.ly/Chitta-NIS3

of Science Education and Research (IISERs) would be set up in Kolkata and Pune. Since the objective of both an IISER and a NIS is the same, this declaration has come as a shock to Oriyas across the country and abroad. While Non-Resident Oriyas (NROs) have launched e-signature campaigns and a blog-spot has been created by Prof Chitta Baral to highlight the issue. Agamee Odisha has taken up the cause to sensitise and educate the people of the State as well as at the national level to articulate a strong voice in favour of a NIS."

- The President of the Odisha Society of the Americas (OSA) wrote about this effort mentioning Chitta's name in their January 2006 newsletter at http://bit.ly/Chitta-OSA2. It says: "Many of you may be familiar with, and perhaps already involved in opposing the outrageous reversal of Indian Central Government's proposal to locate one of the three proposed sites for the Indian Institute of Sciences in Bhubaneswar. Thanks to the unrelenting work by Mr. Chitta Baral, and several others following him, the issue has generated wide media attention and engaged many pro-Orissa intellectuals, administrators, legislators, powerbrokers, and activists from all walks of life. We are still long ways before all this can impact the legislative process and executive order in favor of Orissa. Please take the time to familiarize and update yourself with the issue through the blogsite: http://iiser.blogspot.com. You will find numerous ways in which you could contribute. Please contact either Chitta Baral (chitta@gmail.com) or Dhirendra Kar (dhirendrakar@hotmail.com) to follow up on your suggestions. It may serve to remind each other that the collective diaspora from Orissa is stronger than we can imagine! With best regards, Niranjan Tripathy, President, Orissa Society of the Americas."
- Chitta did a rough analysis of the per capita spending of the Indian government on higher education in various states of India. This was widely reported in Indian media and a syndicated news item appeared in the International Herald Tribune accessible from the web archive at http://bit.ly/Chitta-IHT² It says: "A preliminary report prepared by Prof. Chitta Boral of Arizona University "State-wise distribution of HRD national highways funding in India" goes on to show that while the government spends Rs 177.12 per person in Delhi, the amount per head in Bihar is just Re 1.87. The phrase "national highways" in this case is actually a reference to higher educational institutions. It explains: "Although these institutions theoretically allow equal access to students from all states, like national highways being used by people, students in a state where a particular institution is located have more awareness and more access to it as it is more convenient to them. In fact, the national highways are more evenly distributed in the country than the educational institutions." Highlighting the "glaring disparity", a statewise breakup of the funding of higher educational institutions through the HRD goes on to show that the Centre was spending Rs 177.12 per person in Delhi, while it

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 $^{^2\} http://www.nis.orissalinks.com/vol1/2006-02-12-asian-age-nis.pdf$, http://bit.ly/Chitta-IHT2

was Rs 105.42 in Uttaranchal, Rs 105 in Arunachal Pradesh, Rs 77.70 in Assam, Rs 33.78 in Himachal Pradesh, Rs 28.10 in West Bengal, Rs 25.12 in Karnataka, Rs 17.79 in Tamil Nadu, Rs 17.09 in Maharashtra, Rs 17.08 in Uttar Pradesh, Rs 16.20 in Jharkhand, Rs 16.05 in Andorra Pradesh, Rs 14.50 in Jam and Cashmere, Rs 13.38 in Punjab, Rs 8.52 in Harman, Rs 7.90 in Karen, Rs 7.39 in Chhattisgarh, Rs 7.20 in Madhya Pradesh, Rs 4.87 in Gujarat, Rs 4.07 in Orissa, Rs 2.59 in Rajasthan and Rs 1.87 in Bihar.

Delhi, the report notes, has a large number of higher educational institutions: besides Delhi University and Jawaharlal Nehru University, there is the Indian Institute of Technology, Jamia Millia Islamia, AIIMS, the School of Planning and Architecture and IGNOU.

Over the past few months, a group of educationists in India and abroad have been writing to the Prime Minister and Mrs Sonia Gandhi over the "regional imbalances" in education in the country. Dr Digambar Patra, of the department of physics of Waseda University, Tokyo, stated that the educationists had also organised an email protest campaign over the issue. Of them, Prof. Chitta Boral receives an acknowledgement of his letter from Mrs Gandhi. The letter was, incidentally, addressed to the Prime Minister, with a copy marked to Mrs Gandhi.

Besides referring to the disparity between states in higher educational institutions, the letters also referred to the "stepmotherly" attitude towards Orissa."

• One of the national newspapers in India (Indian Express) asks Chitta to write an op-ed on the issue. His op-ed, very critical of the Prime Minister, appears a day after (July 1st 2006) news items appear that the Indian Prime Minister has conveyed that a National Institute of *Science* will be set up in Bhubaneswar. (The op-ed was submitted about a week earlier.) The op-ed title "Bias against Bhubaneswar" is archived at http://bit.ly/Chitta-IExp1.

This was a successful movement, which culminated in the Prime Minister of India coming to Bhubaneswar on August 28th, 2006 and making the announcement of the establishment of NISER Bhubaneswar. The institute (https://www.niser.ac.in/) started classes in 2007 and now (12 years later) has a vibrant campus and multiple programs and schools.

Just to recap and hint at a counterfactual, the Indian government in 2003-2004 had taken steps and made announcements regarding 4 new National Institute of Sciences (NIS) in 4 cities of India: **Bhubaneswar, Pune, Chennai and Allahabad**. A new government of a different party that took over in 2004 made a new announcement (in 2005) of having similar science institutes (IISER) at **Pune and Kolkata**, and no longer mentions Bhubaneswar, Chennai and Allahabad. Chitta coordinated a movement (during 2005-6), both in ground (in India) and in the cyberspace that resulted in the Prime Minister of India announcing in August 2006 a

similar science institute (NISER) in **Bhubaneswar**. That institute was started in 2007 and is well developed now. There were no complaints from the other two cities (**Chennai and Allahabad**) that were passed on and to date there is no plan or announcement of similar science institutes in those two cities. Five other IISERs were later established in other cities of India.

3. Establishment of an Indian Institute of Technology (IIT) in Bhubaneswar, India: On August 15th 2003 the then Prime Minister of India had announced that 5 new IITs will be set up by upgrading promising academic institutions. This was under consideration for several years and in 2006 several existing IITs started discussing opening new campuses in other cities of India. In late 2006 the Indian government decided to start few new IITs from scratch. One article in the Times of India on 29th August 2006 even mentioned that two IITs will be established in Odisha³, but the subsequent announcement⁴ on December 19 2006 did not mention Odisha.

During this period Chitta made various efforts by writing letters, emails and blog posts, by writing articles in national newspapers, and by urging the Odisha state government to make a demand, for the establishment of an IIT in his home state Odisha. The effort was successful in that the Indian government on March 28th 2008 announced (https://pib.gov.in/newsite/erelease.aspx?relid=36955) locations of 4 new IITs, including one in Bhubaneswar. Following are pointers to articles written by Chitta (in an Indian national newspaper) and articles that mention Chitta's name towards this effort.

- <u>July 11, 2006</u>. For IIT upgrade, an alternative roadmap Article in the op-ed page of Indian Express and New Indian Express archived at http://bit.ly/Chitta-IExp2.
- <u>December 21, 2006</u>. Higher Education Lower Development. Article in the editorial page of Indian Express and New Indian Express archived at http://bit.ly/Chitta-IExp4.
- February 8th 2007, http://bit.ly/Chitta-IIT1: This article quotes of Chitta and says, "Thus, taking into account the emerging conditions in Orissa that necessitate quality institutions to churn out personnel, the Union HRD Ministry should sanction an IIT to the State, noted academician and professor of Arizona State University Chitta Baral said."
- 23rd April 2007, http://bit.ly/Chitta-IIT2: It says "Setting up an Indian Institute of Technology (IIT) in the Capital city of Orissa has caught the imagination of the Gen X of the state. Scientists, Educationists, Political Leadership and people in general are trying hard to make out a case for Orissa in various forums. Leading the pack is Professor Chitta Baral of Arizona State

4 http://bit.ly/Chitta-IIT5

³ http://bit.ly/Chitta-IIT4

University. Prof. Baral in a free wheeling interview with tathya.in have harped on various issues as to why the obsession for an IIT". It then links to the interview at http://bit.ly/Chitta-IIT3. In that interview Chitta answers questions such as: Why does it matter where an IIT is located? Many IIT do not have much impact, Comment! How IIT will help in providing qualitative growth? Why then should Orissa get preference. But the central government is already establishing a NISER in Bhubaneswar so why an IIT? Some people question that there are so many issues in Orissa, and why should the people pick establishing an IIT as a high priority item at this point of time. Some people say that one of the main goals of making an IIT is to create world class institutions in India and the locations should be based on that. Is Orissa industrialized enough? Are there industries in Orissa that will be benefited by an IIT?

- May 9th 2007, http://bit.ly/Chitta-IIT6: This article talks about one of Chitta's effort and says, "Charting out details of investment by HRD Ministry in the country, leading NRO Chitta Baral of Arizona State University has brought home a point that Orissa remains in the lowest spot so far funding is concerned. The statistics shows that the HRD Ministry was scheduled to spend Rs 4.07 on fully funded HRD institutions (like IITs, IIMs, etc.) per person in Orissa, while it will spend Rs 183.08 in Delhi, Rs 41.20 in West Bengal, Rs 33.4 in Karnataka, Rs 27 in Tamil Nadu, Rs 28.38 in Maharastra, Rs 17.73 in UP, Rs 16.05 in Andhra, Rs 33.27 in Punjab, Rs 8.13 in Haryana, Rs 7.90 in Kerala, Rs 9.02 in MP, Rs 4.87 in Gujurat, Rs 2.59 in Rajasthan, and Rs 1.87 in Bihar. In other words Bihar, Rajasthan and Orissa were at the bottom of per-capita spending by the HRD Ministry in its fully funded higher education institutions, he said. Professor Baral said that an IIT will go a long way to provide high quality technical expertise to the rapidly industrialized Orissa for which CM must take up the issue at Central government level."
- 29th September 2007, http://bit.ly/Chitta-IIT7: Following is a quote from that. "While other states have already staked their claims for IIT including Karnataka, Kerala and Tamil Nadu, Orissa is yet to ask for the same. "Unless we do the same, we will lose out", lamented a visibly worried Chitta Baral, who teaches in Arizona State University. "The Chief Minister must immediately send a letter to the Prime Minister followed up by a vision document", said Professor Baral."
- 31st January 2008, http://bit.ly/Chitta-IIT8: Following is a quote from that. ""This is a clear indication of an ulterior design of the MHRD", lambasted Chitta Baral. Professor Baral, who teaches at Arizona State University alleged that the Union Minister is sending testing balloons and gauzing the situation."
- http://iit.orissalinks.com/vol3/20080212%20tathya%20iit.pdf (13th February 2008): Following is a quote. "Non Resident Oriyas (NRO)s like Professor Chitta Baral, Dhirendra Kar, Professor Digambar Mishra, Deba Nayak, Sandip K Das Verma and others are trying their level best to influence the Policy makers. These NROs are in constant touch with the Representative of

- the Assembly and Parliament to take up the cause of the lagging higher education in general and professional education in particular of the state."
- 2nd March 2008, http://bit.ly/Chitta-IIT9: Following is a quote. "After repeated request from the leading Non Resident Oriyas (NRO) like Chitta Baral, Dhirendra Kar, Sandip Kumar Dasverma, Deba Nayak and several others, our Members of Parliament hardly raised their voice. And resulted is, forget about getting one, no body in the MHRD is even dropping a hint on the Orissa's claim for an IIT."
- 28th March 2008: On this day locations for 4 new IITs were announced, including one in Odisha: http://iit.orissalinks.com/vol4/20080329%20Tathya%20iit.pdf. Several people commented on this article and appreciated Chitta's effort. Following are some quotes:
 - At the first instance Tathya.in has once again proved that it is for the cause of Orissa. Reportings of the most popular website has tremendous effect on the Bureaucrats, Educationists, Inteligentsia and young educated mass. Secondly ledaing NROs like Professor Chitta Baral, Mr.Dhirendra Kar and few others have relentlessly tried for the IIT and World Class University and Central University.
 - Professor Chitta Baral led the movement sitting at United States and Oriyas are reaping the benefits. He has to be congratulated. I congratulate Professor Baral for your dogged pursuit
 - Congratulations to Baral Babu and Lalit Babu from AgamiOrissa for making it a Mass movement. Now, the State Govt. should immediately, provide land after deciding the locations. This should be a priority, or, the opposition will blame the govt. for going slow on this.
- **4.** Adding to the dialogue in India about diversifying the locations of centrally funded higher education institutions in India: During 2006-2007 Chitta wrote few other articles in the national newspaper Indian Express and wrote several emails to various officials in the Indian government regarding the need for the country to broad base its higher education institutions. This added to the dialogue in the country on this subject and had long-term implications. For example, while prior to 2008, India had 7 IITs at Mumbai, Delhi, Kolkata, Chennai, Kanpur, Guwahati and Roorkee, India now has 23 IITs, 8 of which where established in 2008-09. (https://en.wikipedia.org/wiki/Indian_Institutes_of_Technology) The 28th March 2008 declaration also mentioned Central Universities in each of the states of India that did not have one. This included one in Odisha, which Chitta was advocating to be established in one of the backward districts of Odisha. It was established in one of the backward districts of Odisha. Two of Chitta's op-ed articles on this topic are at:
 - November 17, 2006. The gold that keeps Orissa poor. Article in the editorial page of Indian Express and New Indian Express. This is archived at http://bit.ly/Chitta-IExp3.

• January 19, 2007. Central university as development pill. Article in the editorial page of Indian Express. This is archived at http://bit.ly/Chitta-IExp5.

Also as mentioned earlier, Chitta's rough analysis of the per capita spending of the Indian government on higher education in various states of India was widely reported in Indian media and a syndicated news item appeared in the International Herald Tribune accessible from the web archive at http://bit.ly/Chitta-IHT. It says: "A preliminary report prepared by Prof. Chitta Boral of Arizona University "State-wise distribution of HRD national highways funding in India" goes on to show that while the government spends Rs 177.12 per person in Delhi, the amount per head in Bihar is just Re 1.87. The phrase "national highways" in this case is actually a reference to higher educational institutions. It explains: "Although these institutions theoretically allow equal access to students from all states, like national highways being used by people, students in a state where a particular institution is located have more awareness and more access to it as it is more convenient to them. In fact, the national highways are more evenly distributed in the country than the educational institutions." Highlighting the "glaring disparity", a statewise breakup of the funding of higher educational institutions through the HRD goes on to show that the Centre was spending Rs 177.12 per person in Delhi, while it was Rs 105.42 in Uttaranchal, Rs 105 in Arunachal Pradesh, Rs 77.70 in Assam, Rs 33.78 in Himachal Pradesh, Rs 28.10 in West Bengal, Rs 25.12 in Karnataka, Rs 17.79 in Tamil Nadu, Rs 17.09 in Maharashtra, Rs 17.08 in Uttar Pradesh, Rs 16.20 in Jharkhand, Rs 16.05 in Andorra Pradesh, Rs 14.50 in Jam and Cashmere, Rs 13.38 in Punjab, Rs 8.52 in Harman, Rs 7.90 in Karen, Rs 7.39 in Chhattisgarh, Rs 7.20 in Madhya Pradesh, Rs 4.87 in Gujarat, Rs 4.07 in Orissa, Rs 2.59 in Rajasthan and Rs 1.87 in Bihar.

Delhi, the report notes, has a large number of higher educational institutions: besides Delhi University and Jawaharlal Nehru University, there is the Indian Institute of Technology, Jamia Millia Islamia, AIIMS, the School of Planning and Architecture and IGNOU.

Over the past few months, a group of educationists in India and abroad have been writing to the Prime Minister and Mrs Sonia Gandhi over the "regional imbalances" in education in the country.

5. 2009- Chitta was appointed as a member of the Higher Education Task Force of Odisha: The appointment was published in the state Gazzette at http://govtpress.odisha.gov.in/pdf/2009/1637.pdf. It said: "With the objective of preparing a Perspective Plan Document for Higher Education in the State of Orissa, Government have been pleased to constitute a Task Force consisting of the following members". As part of this task force Chitta wrote a vision document "Orissa Higher Education Vision 2020".

⁵ https://sites.google.com/site/orissavision2020/

6. 2009 - Mooted the idea of creating India's first Jesuit University and helped in its establishment as Xavier University: India has several Jesuit institutions, many of them 100+ years old, yet there was no Jesuit university in India. Chitta's hometown Bhubaneswar had (and still has) a Jesuit Business School called XIMB (Xavier Institute of Management Bhubaneswar), which was (and is) highly ranked in India. On June 23rd 2009 Chitta proposed to the director of this institute that they should pursue becoming a university. (There is no formal record of this except in Chitta's email archive.) The director liked the idea and pursued it and Chitta helped in the process. An archived news report mentioning Chitta's effort is at http://bit.ly/Chitta-XUB1. It says, "Aclaimed academicain and Non Resident Odia Prof. Chitta Baral urges the state government to save Xavier University by passing an ordinance immediately. In a letter to Chief Minister Naveen Patnaik, he urged this. Prof. Baral said that for the last three years Xavier (the organization associated with XIMB) has been trying to established a Xavier University in Bhubaneswar with programs in Balangir and Sambalpur. But despite the go ahead from the Chief Minister and the Cheif Secretary some vested interests have blocked and given a 3 year run around to the effort."

Eventually the Odisha state government passed an act in 2013, which led to the establishment of Xavier University Bhubaneswar. Chitta mentored and continues to mentor the Computer Science school in that university.

7. 2012 - Living Legend Award (2012) by OdishaDiary: This organization gave Chitta an award and wrote the following in http://bit.ly/Chitta-award1.

"OdishaDiary (Orissadiary.com) conferred Odisha Living Legend Award 2012 on Prof Chitta Baral. He received the award for his excellent work of policy advocacy as a member of the Odia Diaspora Community.

Health Minister Dr. Damodar Rout, Revenue Minister Surjya Narayan Patro and Energy and IPR Minister Arun Sahoo presented the award to Prof Chitta Baral at a glittering function held at Jaydev Bhawan, Bhubaneswar on 10th November. On behalf of Prof.l Baral his parent received the award. Expressing his views on the occasion, he highly appreciated the effort of OdishaDiary for recognizing extraordinary talents across different fields of the state.

A Professor at Arizona State University of the United States, Prof Baral is a well-known as a passionate advocate of strengthening education and health in Odisha. As a leading Non-Resident Odia, he has been a strong policy advocate on the issues of development, health, education and cultural heritage. Through his extensive research and advocacy he has been able to influence policy makers in Odisha and India. The National Institute of Science Education and Research (NISER) and IIT-Bhubaneswar were two such successful campaigns. Chitta's research on NISER and the general neglect of Odisha in higher education matters was presented in the Supreme Court of India and was

debated in the Parliament of India. The movement was successful and the institute was established in Odisha. Chitta was also among the leaders in the movement to get an IIT (Indian Institute of Technology) for Odisha. This movement was also successful and Odisha now has an IIT. Few years back, the Odisha government appointed Chitta as a member of its Higher Education Task Force. He was the only member of this task force from outside India.

Prof. Baral is an active member of the Odisha Society of the Americas and has organized various events and forums in its annual conventions. Chitta has led a movement (through emails, blogs, phone calls and media campaign) to get attention to the neglected sectors of education and health in the state. He has inspired many young Odias throughout the globe to take active interest in Odisha's development. He has set a standard for many NROs to follow the path of policy advocacy.

This award is an acknowledgement of his decade long work as a public intellectual and policy advocate in the cause of Odisha's development and global reputation.

It should be noted that OdishaDiary (www.orissadiary.com), the No-1 webportal on Odisha is visited by more than fifty thousand visitors daily. OD is the first complete portal on the state of Odisha. OD is designed to reflect on the contributions and concerns of the Odiya people, their language, society, polity, education, health, economy, business and industry, tourism, public grievances, citizen services, inspiring success stories and anything and everything that affects them and has impacts on provincial and national public policy.

Through news, views, analyses and interactivity, OD provides readers a composite picture of Odisha. OD is a gate-way for anyone interested in the state of Odisha. More specifically it is useful to the policy makers, investors, researchers, media persons, students, politicians and the common men, the general public as a whole. Orissa Diary (OD) has fast entrenched itself in the lives of a young and dynamic readership on Odisha throughout the globe. Member of Parliament, Prasanna Patasani and MP Rabi Narayan Mohapatra, Founder and Editor-in-Chief of OdishaDiary Mr. Rashmi Ranjan Parida were also present on the occasion."

8. 2014 Distinguished Odia Award (2014) by the Odisha Society of the Americas. http://www.odishasociety.org/winners-of-osa-awards-2014/ : In 2014 the Odisha Society of the Americas, an organization of people associated with the state of Odisha and living in the Americas (mostly USA and Canada) gave their highest award to Chitta for his contributions to Odisha.