SCALING UP IITs

The More the Merrier

M Jagadesh Kumar

In a country where more than one-third of the population — about 450 million people — needs to be educated, only 30 million reach higher educational institutes. A miniscule number of them — 72,000 students — study in Indian Institutes of Technology (IITs). There is a crisis we are facing.

Our current model of higher education is very rigid. It expects students to stay in hostels and attend lectures. With higher education moving from being elitist to more mass-based, this model will no longer be tenable. Each IIT needs to handle more students by experimenting with alternate methods of higher education delivery. The number of admitted students in each IIT is limited primarily due to lack of hostel accommodation and the inability to fill faculty positions.

The practice of students who don't live on campus but study at IITs is not new to the IIT system. Can we scale up this often-ignored model? It is in this context that a recent decision of IITs to increase the number of day scholars in various courses with an aim to take their total intake to 100,000 by 2020 assumes importance.

Last year, more than 3.5 lakh students went to universities overseas, mostly in the US, Australia, New Zealand and Canada. More than 12% of the US higher educational market comprises Indian students. The reason being the inability to get admission in the best institutions in India not because they are academically weak but due to the mindless competition for limited number of seats.

If IITs can increase their day scholar intake significantly, students who wish to avail of high quality education in India at a much lower cost will have a choice. If this intake increases by a factor of three or four from the current 72,000, questions will, of course, be raised. The first being about the teacher-student ratio.

Most professors are uncomfortable handling large classes with the common excuse that the student-teacher interaction will suffer. But today, everyone can interact with each other, very comfortably, not always via physical meetings but virtually. Teachers need to adapt to newer tech-enabled tools for interaction with students. There shouldn't be a problem in delivering lectures in classrooms with 500 students or more if they are well-equipped with audio and video facilities.

The second question is the evaluation of students. Currently, we conduct paper-based examinations, which won't be tenable with an increase in student numbers. We need to develop technology-based solutions to evaluate students correctly during the lecture hours with the possibility of providing instant feedback to students.

If exams do not provide timely feedback to students to alter their learning strategies to perform better, why do we need them? Depending on the student performance feedback, even teachers should alter their teaching strategies. Teachers, too, need training in adapting newer pedagogical approaches.
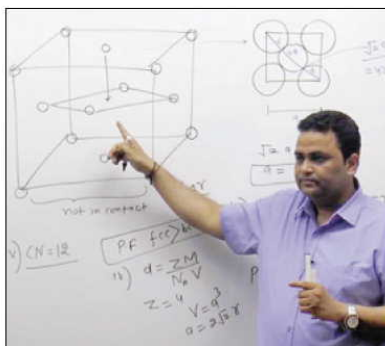
Then, there is the matter of the availability of a well-trained faculty. IITs are struggling to fill up the nearly 30% vacancies while teachers continue to retire. Why not employ a faculty that includes non-Indians in IITs? With a steep decline in the academic job market in developed countries, attracting the best overseas talent to fill the teaching positions in IITs should not be a problem.

Another problem area is the faculty salary growth that's mired in bureaucratic tussles. Faculty salaries should be comparable to private sector incomes. Let the IITs decide the salary structure for their faculty by meeting the additional salary payment to the faculty through their internal resource generation.

With this, of course, comes the question of performance and accountability. Perhaps it is time we made faculty positions contractual and renewable every five years after assessment. With this condition, let the faculty work as long as they are able to contribute with no retirement age.

Finally, what about global rankings? IITs should strive to set a global standard for efficiency in fulfilling their social obligations by making higher education accessible to the most-marginalised sections of Indian society rather than worry too much about their place in word rankings. Let IITs draw attention by doing things others are unwilling to do.

If the demographic advantage that India enjoys today is to lead to a socially and economically prosperous India, we have to eschew elitism. This requires the IITs to be more innovative and less rigid in reaching out to the masses.

Think out of the box

The writer is Vice Chancellor, Jawaharlal Nehru University, New Delhi

Amar Ujala ND 12/09/2016 P-1

आईआईटी की पढ़ाई होगी और महंगी

फीस स्ट्रक्चर आईआईएम की तरह करने का सुझाव, वर्ष 2020 तक बढ़ेंगी 20,000 सीटें

अमर उजाला ब्यूरो

कानपुर।

देश की 22 आईआईटी की पढ़ाई और महंगी होगी। इस पर बोर्ड ऑफ डायरेक्टर्स की सहमति बन गई है। सत्र 2017-18 से फीस बढ़ाई जा सकती है। बीटेक के साथ ही एमटेक, एमबीए, एमएससी, एमडैस (मास्टर ऑफ डिजाइनिंग), वीएलएफएम (विजनरी लीडरशिप इन मैन्युफैक्चरिंग) और पीएचडी की फीस भी बढ़ाई जाएगी।

आईआईटी से बीटेक करने वाले छात्रों की सालाना फीस इसी सत्र (2016-17) से दो लाख रुपये हो गई है। पिछले सत्र (2015-16) में सालाना 90 हजार थी। एक सत्र भी नहीं बीता और फीस बढ़ाने पर

नए आईआईटी खुलेंगी

देश के अलग-अलग राज्यों में नई आईआईटी खोलने का फैसला हुआ है। इसके जरिये वर्ष 2020 तक 20 हजार सीटें बढ़ाई जाएंगी।

दोबारा सहमति बन गई। इसीलिए रविवार को आईआईटी भुवनेश्वर में बोर्ड ऑफ डायरेक्टर्स की मीटिंग भी हुई। चर्चा के बाद कहा गया कि आईआईटी का फीस स्ट्रक्चर आईआईएम की तरह होना चाहिए।

तभी खर्च निकल पाएगा। चार साल की अवधि में आईआईटी के एक छात्र की पढ़ाई पर (बीटेक की पूरी पढ़ाई के दौरान) करीब 24 लाख रुपये खर्च होते हैं। बताते चलें कि देश के अलग-अलग आईआईएम की सालाना फीस आठ लाख से 16 लाख रुपये सालाना है।

मंत्रालय करे ब्याज का भुगतान : बोर्ड ऑफ डायरेक्टर्स की मीटिंग में तय हुआ कि एजुकेशन लोन के ब्याज का भुगतान मानव संसाधन मंत्रालय से करेगा।

IITs bat for increasing seats

http://timesofindia.indiatimes.com/city/bhubaneswar/IITs-bat-for-increasing-seats/articleshow/54286909.cms

BHUBANESWAR: Directors of various IITs here on Sunday stressed the need to increase admission capacity of the elite institutions to accommodate more students from undergraduate to PhD level.

Director of IIT Bhubaneswar (IITBBS), R V Raja Kumar, who chaired the meeting in this regard, said the general view was that the available seats are far low given that lakhs of students aspire to join these institutions. Similarly, taking more PhD scholars would improve research, he said.

The meeting was attended by 13 directors (nine in person and four through Skype).

Dainik Jagran ND 12/09/2016 P-5

दबाई जा रही मनरेगा मजदूरों की आवाज : प्रो. खेरा

जासं, मुजफ्फरपुर : संघर्ष के बलबूते मनरेगा को राष्ट्रीय पहचान दिलाने वाली आइआइटी दिल्ली की प्रोफेसर रीतिका खेरा ने कहा है कि सरकार की इस महत्वाकांक्षी योजना की सफलता के लिए मजदूरों को एक और लड़ाई लड़नी होगी। मनरेगा मजदूरों की आवाज को दबाने की कोशिश हो रही है। उनके समर्थन में मुजफ्फरपुर (बिहार) पहुंचने के बाद धरनास्थल पर उन्होंने ये बातें कहीं।

Amar Ujala ND 12/09/2016 P-4

एनटीपीसी-आईआईटी मद्रास के बीच करार

नई दिल्ली। देश की सबसे बड़ी बिजली उत्पादक कंपनी, एनटीपीसी व आईआईटी मद्रास ने अनुसंधान व विकास (आरएंडडी) के लिए करार किया है। इस करार के तहत राख के इस्तेमाल, कार्बन को रोकना, जिप्सम बिल्डिंग, डीसी ग्रिड सिस्टम, डीसी लाइन, ग्रिड स्थिरता व कई अन्य चीजों को लेकर आरएंडडी किया जाएगा। नई तकनीक के विकास के लिए दोनों तरफ से संयुक्त रूप से प्रयास किए जाएंगे।

IITs ban startups, then invite them to placement meets

FLIP FLOP Individual IITs break ranks in the interests of their students to woo companies 'blacklisted' by placement panel

Rozelle Laha
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NEW DELHI: Three of the 30 startup companies that had been blacklisted by the All-IITs Placement Committee have got invitation to participate in upcoming campus placements at IITs Delhi, Kanpur, Madras, Kharagpur and Guwahati, just 15 days after they got their snub.

The students' placement office, IIT Kanpur, invited Medd, a blacklisted health-tech startup, to campus recruitment and summer internship of 2016-17 on August 29.

Similarly, IIT Delhi invited another banned startup, NowFloats Technologies Pvt Ltd, on September 2. HT has copies of these emailed invitations.

The founder of a blacklisted startup, seeking anonymity, confirmed that he was invited to this year's placements in IITs Madras, Kharagpur and Guwahati. He further said he was in touch with IITs Roorkee and Kanpur on the issue. However, he refused to share copies of the emails, saying, "It seems most IITs are now being rational in choosing to work with startups."

When contacted AIPC refused to comment on the story, but a senior official told HT on the condition of anonymity that the committee has not received any input from any IIT on inviting 'blacklisted' companies.

The All-IITs Placement Committee banned 31 startups on August 25, for reneging on job offers. However, the ban on

■ **Students at IIT Delhi campus**

SAUMYA KHANDELWAL/HT FILE

> They should have given us a notice of at least 14 days so we could justify our actions. It was unfair on the part of the panel to inform the media of the ban. It is like an act of defamation.
>
> ARPIT KOTHARI, co-founder, Medd

Crayon Data India Pvt Ltd was revoked later, said panel sources.

Seven of the 30 blacklisted startups have confirmed the panel has not contacted them after the ban. The other banned firms have not answered HT's emails.

Mera Hunar's CEO Vinay Dalal alleges the panel was "unfair" in giving big brands like Flipkart, who reneged on job offers, a chance to justify their actions, but not others. "You cannot have two sets of rules."

"We should have got an official communication on the ban. They should have given us a notice of at least 14 days so we could justify our actions," says Arpit Kothari, co-founder, Medd.

"It was unfair on the part of the panel to inform the media of the ban. It is like an act of defamation," he added.

Jasminder Singh Gulati, founder of NowFloats, said, "When you are building a company, you would not want any negative reviews of you."

Though the panel sent a strong message to the startups that didn't honour their job offers, the ban seems insignificant.

For instance, CashCare received a job application from a final-year IIT student on August 26, a day after the ban. On September 5, one of the new IIMs invited another banned startup to campus placements this year. HT has copies of these mails.

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SCRAMBLE FOR TALENT

Govt steps in as PSUs hire IITians mid-course

Neelam Pandey
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NEW DELHI: The Indian Institutes of Technology (IITs) are reportedly having a hard time retaining their MTech students, with many quitting the course after landing jobs in state-owned enterprises.

Officials said a number of IITs complained of such occurrences at a recently held IIT council meet, presided by human resource development (HRD) minister Prakash Javadekar. It was learnt that of 8,000-odd students, 2,000 left the course after getting jobs in public sector undertakings (PSUs). To tide over the problem, the council has decided to ask all such PSUs to let students join after completing the programme.

"We will take up the matter with the PSUs. A lot of time, money and energy are invested in the MTech programme. IITs are premier institutes, and there is a long waitlist for getting into them. If students leave midway,

AT A RECENT IIT COUNCIL MEET, IT WAS LEARNT THAT OF 8,000-ODD STUDENTS, 2,000 LEFT THE COURSE AFTER GETTING JOBS IN PSUs

the seats go empty. We want to encourage students to go for higher studies and research," said a senior official on the condition of anonymity.

"The HRD ministry will write to the department of public enterprises in this regard," said another official.

Admissions to the IIT MTech programme take place through the Graduate Aptitude Test in Engineering (GATE), the score for which is also used by PSUs for recruitment. GAIL, ONGC and SAIL are said to be among the PSUs that offer jobs to MTech students from IITs.

Govt steps in as PSUs hire IITians mid-course

To discourage 'deserters', the council also approved a proposal to recover the entire fellowship amount (of Rs 12,400 per month) if any of the students leave the programme midway. "This happens because there is immense pressure on students to start earning after completing their bachelors. We are trying to get the PSUs onboard, so these students can rest assured that their jobs won't go to anybody else," the HRD official said.

The IIT council, which is the highest decision-making body for the prestigious institutes, also considered providing 1,000 teaching assistantships – bearing a fellowship amount of Rs 25,000 per month – to meritorious MTech students.

The council had recently approved a proposal to introduce the Prime Minister's Research Fellowships, aimed at encouraging BTech graduates from IITs to directly enroll in PhD courses.

There are 23 IITs in the country, with a total count of 72,000 students. Around 14,000 MTech students are enrolled in the institutes.

NIT-T adopts 3 villages in Pudukkottai, Thanjavur

http://timesofindia.indiatimes.com/city/trichy/NIT-T-adopts-3-villages-in-Pudukkottai-Thanjavur/articleshow/54285681.cms

Trichy: The National Institute of Technology-Trichy (NIT-T) has adopted five villages, under the the Unnat Bharat Abhiyan scheme which aims to improve the quality of life in rural areas. The villages adopted were Nodiyur, M Solakampatti and Kothampatti in Kandarvakottai taluk in Pudukkottai district and Aachampatti and Kosuvapatti in Boothalur taluk in Thanjavur distrirct.

As a part of the celebrations of 'Swachhta Pakhwada' from September 1 to September 15, NIT-T set three key objective - To clean the campus through activities such cleaning, weeding out old files, damaged equipment etc, to instil cleanliness and hygiene in the minds of faculty, staff and students and to clean the surrounding villages and spread the message of cleanliness and hygiene. On Sunday, a 60-member team comprising doctors, paramedical staff, faculty, students, sanitary staff camped in the villages to take part in a medical camp, cleaning of public places and creating awareness through posters and handouts.

The medical camp was set up and medical services such as blood-pressure and diabetes check-ups were done. Medicines

were provided free of cost. About 300 people were offered diagnosis, medicines and suggested further course of treatment. Few patients were advised to visit NIT hospital for further treatment.

The students and staff members were also involved in cleaning the villages. They cleaned school areas, temples and public places with the help of the sanitary staff. Sessions were also held in which the villagers were given awareness about the importance of hygiene. Students and staff of the college interacted with the villagers and discussed about their lifestyle and also the barriers they face in availing basic requirements such as food and hygiene. The students and staff have decided to target these barriers during their next visit.

"As the top NIT, we are leading the NIT system in all aspects of meeting the requirements of the stakeholders, particularly in the neighbourhood. A number of training and development programmes for youth and women with the objective of dramatically achieving socio-economic development in these villages will be implemented in the next two years," said G Kannabiran, director of NIT-T.

IIT-B set to conquer space with launch of new satellite
http://www.hindustantimes.com/mumbai-newspaper/iit-b-set-to-conquer-space-with-launch-of-new-satellite/story-6lHZbuUckE3L3dYU6kXybL.html

MUMBAI: After successfully building racing cars that can navigate through muddy terrain and designing unmanned aerial vehicles meant for dropping supplies in areas hit by natural calamities, some engineering students from the city are conquering a new frontier — space.

Last week, a team of students from Indian Institute of Technology, Bombay (IIT-B) handed over Pratham, a 'microsatellite' designed by them, to Indian Space Research Organisation (Isro), which will launch the satellite into space at the end of this month.

Over the next few days, some of the students will test the satellite with scientists at Satish Dhawan Space Centre at Sriharikota, Andhra Pradesh, from where the satellite will be launched.

The Rs1.5-crore project started in 2008, when a few IITians came up with the idea of building their own satellite. They presented their project plan to Isro, which reviewed it and agreed to help them design and launch it in space for free. Subsequently, a Memorandum of Understanding (MoU) was signed between IIT-B and ISRO.

However, the project was delayed after it hit a few roadblocks. "In 2010, the project was almost completed, but many members graduated and left the institute. The satellite was in the cold storage for a couple of years, as the duration of the MoU came to an end in 2011, and more students graduated," said Manvi Dhawan, a member of the team who graduated this year.

In 2012, after Isro asked IIT-B if it wants to continue with the project, the institute decided to form a fresh team of students to design Pratham and a new MoU was signed with Isro. To overcome the challenge of students leaving the institute and the project once they graduate, the Pratham team has been bringing new students on board every semester.

In the same year, IIT-B started working on its 'microsatellite'. It had held a workshop in a bid to collaborate with other colleges in their space endeavour. The colleges were motivated to build their own ground stations — the terrestrial radio station to communicate with the satellites. One of the colleges which eventually started building a ground station was Atharva College of Engineering in Malad.

For two years, a team of students from the college did the research work required for building a ground station at the college terrace. In the next two years, they set up antennae and the station was finally inaugurated in 2012.

With the uncertainty prevailing over IIT-B's Pratham, the students at Atharva College of Engineering decided to design their own satellite. It took them four years to complete APSARHA-1, a balloon satellite. "We have already tested the satellite and are awaiting the government's nod for its launch," said Pragnesh Panchal, a graduate, who has worked on the project for three years.

September 11

Not interfering with autonomy, will give it to institutes that grant degrees without crutches: Prakash Javadekar

http://indianexpress.com/article/india/india-news-india/prakash-javadekar-human-resource-development-hrd-ministry-smriti-irani-bjp-educational-institutions-iim-iit-3024669/

Amid speculation over the provisions of the new education policy, Javadekar has been asserting that it won't affect reservations and minority education.

HRD Minister Prakash javadekar during the Idea Exchange at New Delhi office. Express photo by Renuka Puri.

Why Prakash Javadekar? Earlier the Minister of State (Independent Charge) Environment, Forest and Climate Change, Prakash Javadekar took over the HRD portfolio from Smriti Irani in July, following a Cabinet reshuffle. The former BJP spokesperson has also served as the Minister for Information & Broadcasting in the Narendra Modi government. Amid speculation over the provisions of the new education policy, Javadekar has been asserting that it won't affect reservations and minority education.

PRAKASH JAVADEKAR: The Human Resource Development Ministry touches close to 27 crore students (270 million), from kindergarten to the post graduate level. After the Sarva Shiksha Abhiyan, the expansion of primary and secondary education happened at great speed. Because of the initiative we have now nearly achieved full enrollment. Even the latest UNESCO report says that only 30 lakh students are out of schools.

Right now, the issue is of quality, and that is the real challenge. So how do we improve the quality of education at all levels? To that end, there are two things which we are planning. At the primary level, teachers have to be motivated, they have to be trained properly, vacancies need to be filled, in-service training and pre-service training is required… Secondly, we need community participation.

In case of IITs (Indian Institutes of Technology), NITs (National Institutes of Technology), IIITs (Indian Institutes of Information Technology), Central universities and other organisations; we lack in innovation there. That is India's problem. Sustainable growth can only take place with innovation. We have taken quite a few initiatives to encourage that as well. Modiji is committed to improving the education sector. He wants to set aside more funds for research and innovation.

At the primary level, we want to promote inquisitiveness. Only if we promote inquisitiveness, will innovation happen.

COOMI KAPOOR: Bureaucratisation and a general lack of respect for teachers seem to be big hurdles in improving the education system. Talented people don't want to become teachers because of poor emoluments. How do you plan to get around these issues?

It is a scenario that concerns us. We want to promote and give value to our teachers. I have taken two small but significant initiatives for it. On Guru Poornima, we honoured Parliamentarians who have been in the teaching profession. There are 16 of them (MPs associated with teaching).

We also want to motivate students to become good teachers. Fortunately, in all the tribal areas that I have visited, everyone wants to become a teacher. It is good sign. At IIT, Delhi I met around 200 PhD students, more than 100 of them said they want to become teachers. We want to groom students from an early stage so that they are well equipped to become good teachers. It's about technology, it's about delivery, it's about how you teach… Everything is important. With the Seventh Pay Commission, even the salaries will improve.

The second issue is about respect and freedom, particularly at the higher education level, where a teacher is also a researcher. The freedom that is granted for research by good institutes world over, we need to give our teachers the same kind of freedom. There needs to be funding for research and freedom for pursuing their own assignments. We are promoting that.

We also have good, talented Indian students doing their PhDs in foreign countries. We will track them from the fourth year of their PhD. We will interview them in foreign countries when job fairs happen and bring them back. Youngsters today are ready to come back.

COOMI KAPOOR: Your predecessor, Smriti Irani, was criticised for interfering in the functioning of educational institutions.

It would be unfair to cast aspersions on anybody. As far as Smriti (Irani) is concerned, she has taken many good initiatives. Now, we are not interfering in the autonomy of institutes, in fact I want to make more colleges autonomous. Colleges and universities should come forward and say 'we will float our degrees on our own strength in the market'. ISB (The Indian School of Business) is not recognised by any regulatory body in India but it is the most respected institute world over.

RITIKA CHOPRA: Speaking of autonomy, the IIM Bill has been stuck for a while now. The Bill is ready but it is being sent back and forth between the Ministry and the Prime Minister's Office. As far as we know, the PMO has sought autonomy for the IIMs.

Not just the IIMs, I want to give autonomy to any educational institute which is ready to float its degrees in the market without crutches. As for the IIM (Bill), there is no back and forth. There are many initiatives being taken in higher education sector so there is a pile-up of Bills. We have already cleared the IIT Bill and the NIT Bill. The IIM Bill will also be coming in soon. (The IIM Bill is meant to empower the 19 management institutes to award degrees instead of diplomas for their two-year postgraduate programme. The draft law is modelled on the IIT Act).

RITIKA CHOPRA: The Centre has been slow on appointments. A number of institutions, even those under the HRD, have been without a head for almost two years. You will see a slew of appointments in the days to come.

AMITABH SINHA: Your ministry attracts controversy like probably no other. How will you make the education policy less contentious?

We are taking everybody into confidence. I believe that education is a national agenda, it is not a party's agenda. In October, we will hold a special conference where MPs who are interested in talking about education, can give their suggestions. Many of them have given written suggestions but we will still have one workshop of MPs.

I have written to all governors too, because they serve as chancellors in their respective states. I am getting tremendous response and suggestions from everyone. I have made it very clear that we are not tinkering with constitutional provisions. We want to strengthen the education system. There are five pillars of any new educational policy: accessibility, equity, quality, accountability and affordability. Keeping these five pillars in mind, we have to build a new education policy.

We will hand over all suggestions to the new panel which will be headed by an educationist. It will then prepare a proper draft (of the new education policy), which will go to the Cabinet. I think every generation has a right to revisit its education policy to make it relevant to the national objectives. Education is an emancipator, an enabler… Education is empowerment.

VANDITA MISHRA: There is ample evidence to show that the RSS is particularly interested in your ministry. Every time there is a BJP government, there is a certain mechanism of interaction, co-ordination, talking to each other on HRD appointments, agenda… How are you going to deal with this?

There is no special mechanism (of interaction) with the RSS. They never interfere in the ministry's work. I meet everyone, the communists and the Congress too. I am an RSS product but I believe in everyone who works sincerely in the field of education.

COOMI KAPOOR: But the perception is that appointment to educational institutions are given to only those of a certain ideology?

No, that is not the case. Appointments of teachers or professors in state universities are done by the states. I only have 23 IITs, some IIMs, NITs, IIITs and some Central Universities… even there we are trying to make the appointment process more transparent and merit based.

VANDITA MISHRA: What is your view on student politics? When the Jawaharlal Nehru University and Hyderabad Central University controversies happened, there was a view that instead of playing politics, students should study.

I think the biggest challenge for students today is competition and so most of them concentrate on their studies. For those who want to organise themselves into parties, it is acceptable in a democracy. Under the Constitution, that freedom is already granted.

RITIKA CHOPRA: You said there would be complete transparency in your ministry, but it hasn't made public the report of the one-man judicial commission on the Rohith Vemula case.

The Rohith Vemula report, prepared by Justice (Ashok Kumar) Roopanwal, is under process and as soon as it comes to me, I will give it to all of you. For me, his suicide is a blot. It should never have happened and we shouldn't create an environment which makes students take such extreme steps. Our focus is to stop suicides on campus and so we will wait and see what recommendations have been made by Justice Roopanwal.

We will also add more things and make it a comprehensive package with provisions included for grievance redressal, counselling services, and other facilities for students. We have to ensure as a country that our students don't commit suicide on campus and that their redressals are dealt with at the right time. There needs to be a dialogue and there needs to be a system. This is what I want to put in place. (Rohith Vemula, a PhD student at Hyderabad Central University, committed suicide on January 17, 2016)

COOMI KAPOOR: One big challenge facing parents and students is the complete lack of standardisation of exams and syllabi across states. Some state universities are very generous with their marking, giving 99-100 per cent results. During the Delhi University admissions, this meant that thousands of students were left out, not because of a lack of ability but because of the marking system. Shouldn't the ministry be doing something about it?

We have already taken note of this. There are two issues which need to be addressed by a new policy. The percentile method was devised to check inflation of marks by some states or some boards. Then there is a system of entrance exams to ensure that everyone starts on a common platform. So we have to create a system in which well performing students are rewarded.We are also looking to expand opportunities. We already have 38,000 colleges and the students are making the choice.

AMITABH SINHA: What is your idea of an autonomous institute? What sort of control should the ministry have over them?

I'm not thinking in terms of control. We are here to guide and facilitate. World over, good institutes are those that change their syllabus regularly and make it more relevant to the times. Teaching a 20 year old syllabus would not be a good idea today. Therefore, the syllabus has to be updated by the faculty. For this, they need to work hard and interact with each other. To enable this, we want to do two or three things. We want IITs and other good institutes to interact with other colleges in their region through faculty and student exchanges. That is the kind of atmosphere we want to build, and that is what autonomy means to us.

HARISH DAMODARAN: We're seeing an explosion of demand in rural areas where hardly literate parents now want to send their children to private sector institutions. Does the government have any measures to meet this demand?

The long-term strategy is to improve the quality of public education. That is the answer. I'll tell you a story of how things can be changed. I had adopted a village called Paldev in Bundelkhand, near the MP-UP border. I go there once every 30-40 days. When I first went, I spoke to the teachers about school results and they said it was 11 per cent in Class X and 28 per cent in Class XII. I told them that it was low but that I wouldn't transfer them. Instead I said we would work with them. We organised a special training course for teachers to make education more interesting.

We also got the parents involved, asking them to send their wards to school every day. We wanted the 11 per cent to become 35 per cent and the 28 per cent to become 50. But to my surprise, after seven months of sustained efforts by the students, teachers and the community, the 11 per cent became 51 and 28 per cent became 82. This year, the 82 per cent became 85 per cent and 51 per cent became 77 per cent. So the whole scenario of the schools changed.

What did I do? Nothing. The same students, same teachers and same village changed their own situation and I'm completely convinced that we can similarly motivate and support thousands of teachers to improve the quality of education for millions of students.

ANAND MISHRA: As HRD minister, does it bother you that schools in Jammu and Kashmir have been shut for the past two months?

Everything is working in Jammu and Leh, but the Valley is witnessing a curfew of this scale after many years. Terrorists have attacked and burned down schools… But even today Kashmir has a much higher national average in literacy. Girls' education is also progressing. So let's not see everything as being dark, good things are also happening. Even in these past two months, teachers continued holding classes in areas other than school buildings.

People there are the same as everywhere else. They want to learn. This year, under the Prime Minister's scholarship scheme, 1,900 engineering and medical students have been given admissions. There were 3,800 scholarships, which were

also availed of by students from the Valley. There are many initiatives in place and I am very confident that everyone wants to learn.

ANKUSH KUMAR: How much of your focus is on digital education and do you think it will help in decreasing the student-teacher ratio?

We have a new initiative, SWAYAM (Study Webs of Active-Learning for Young Aspiring Minds). More than 300 courses are ready for classes IX to the post graduate level. These are online courses, formulated by a team of five teachers, and taught by some very eminent teachers as well. So there will be lectures, tutorials, mid-term and final exams as well as certification.

We also want to bring it to television as online formats sometimes have glitches. We have already contracted 32 channels of Doordarshan, which are available free on dish TV. I called a meeting of all cable and dish operators and they enthusiastically participated in the discussion. While we are providing it to them for free, they will charge their customers for it. That's market forces at work. There will also be more openness: education anywhere, anytime. If you're interested in a course, you can take it up and get a certificate for it. That's a big initiative which we've tested successfully and will roll out soon.

IIT directors meet today
http://www.newindianexpress.com/states/odisha/IIT-directors-meet-today/2016/09/11/article3618501.ece

BHUBANESWAR: The 154th meeting of IIT directors is scheduled to be held at the Institute Guest House of IIT Bhubaneswar (IIT-BBS) on Sunday. This would be an important event for the institute as 10 directors of IITs across the country will be meeting to discuss various matters related to governance, future education, faculty and staff matters.

Director of IIT-BBS Prof RV Raja Kumar will chair the meeting. As per the updates, 10 directors will participate directly while three others will join through video conferencing. It is being organized for the first time.

The faculty and staff members of IIT-BBS have expressed their happiness on the event.

The meeting will deliberate on the matters related to implementation of decisions taken during the last

IIT Council meeting held on August 23 this year at New Delhi, activities of PAN IIT Alumni Association, Research Fellowships, student education loans and inviting PSUs for placement.

The directors will also take a drive through the campus and visit different schools and departments of the institute. Later, they would have interactive sessions with students and faculty members, an IIT-BBS release stated.

IITs eye foreign teachers, students
http://timesofindia.indiatimes.com/city/bhubaneswar/IITs-eye-foreign-teachers-students/articleshow/54276336.cms

BHUBANESWAR: IITs are planning to hire faculty members from abroad and admit foreign students to strengthen their brand at the global level and meet the shortfall of quality teachers within the country.

Ways and means to attract teachers and students from abroad top the agenda at a meeting of directors of the elite institutions scheduled to be held here on Sunday. R V Rajakumar, director of IIT Bhubaneswar (IITBBS) who will preside over the meeting, said they will discuss on modalities to achieve the twin goals.

Rajakumar said there is already mechanism to admit foreign students over and above the sanctioned strength, up to 20

per cent of the admission capacity, both at the undergraduate and post graduate level. However, very few foreigners are seeking admissions. "A main reason behind the miniscule percentage of outsiders is lack of awareness among students abroad. We will discuss on how to improve it," he said.

Rajakumar said the only offshore centre for the JEE Advanced, the gateway for IIT admission is Dubai. There would be discussions of possibilities of holding JEE Advanced in several other countries to facilitate the aspirants there take the test.

The IITBBS director said the proposal regarding hiring foreign faculty members is still in a nascent stage. "We will discuss it and send our recommendations to the IIT council. Since there are financial implications, the government has to take a final call on this matter," he said.

Rajakumar said foreign faculty will help the IITs meet shortage of quality teachers. Sources said the elite institutions have been facing average 30 per cent vacancies. The situation is more acute in newer (second and third generation) IITs where it is up to 40 per cent.

September 10

Pioneer ND 10.09.2016 P-01

Rainfall dips as forests shrink

South-west monsoon deficit grows to 16%; IIT study attributes decline in rain to large-scale deforestation

PNS ■ NEW DELHI

The deficit of South-west monsoon in the country has grown from 10 per cent in the last week of August to 16 per cent during the first week of September. According to India Meteorological Department (IMD), the overall countrywide deficit has also risen from 3 to 4 per cent.

A latest study conducted by experts from IIT-Bombay has attributed large-scale deforestation in the country to the decline in rainfall, especially in North and North-east. Deforestation has resulted in a decline in evaporation of water through transpiration from plant surface. This in turn has lowered recycled precipitation that accounts for a quarter of rainfall during the last leg of the season.

The IMD experts, however, hope for a last bout of monsoon surge next week that could result in near to slightly above rainfall during the coming fortnight in parts of east and northeast India besides south Peninsula during the period. Simultaneously, rain is likely to take pace over many parts of central and adjoining north Peninsular India from September 12 onwards. Certain parts of
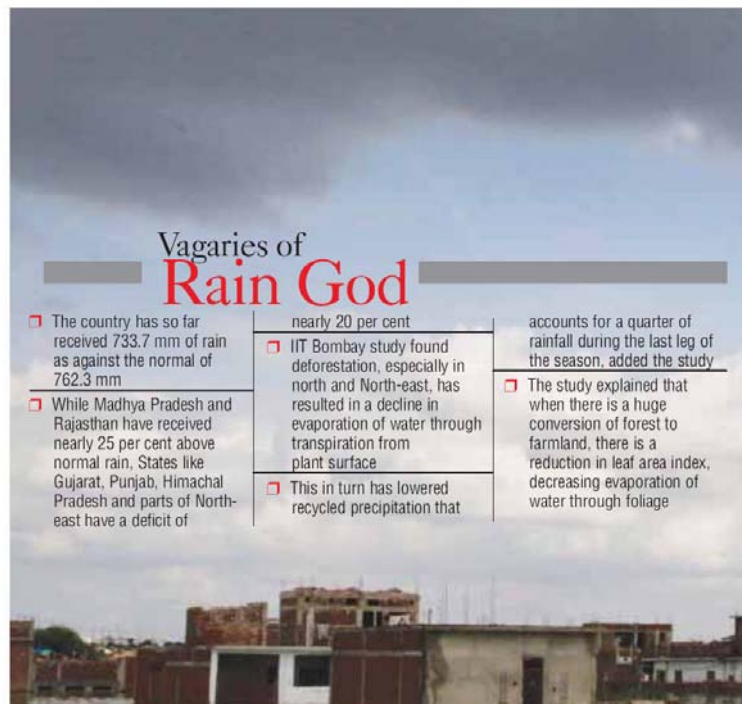
North-West may also receive light rainfall during the same period.

The country has so far received 733.7 mm of rain as against the normal of 762.3 mm. Central India has registered the highest of 875.5 mm rain which is 3 per cent above average. On the other hand, North-east is reeling under the highest deficit of 14 per cent in the country, this season.

So far, the distribution of rainfall in the country has been fairly uneven. While Madhya Pradesh and Rajasthan have received nearly 25 per cent above normal rain, States like Gujarat, Punjab, Himachal Pradesh and parts of North-East have a deficit of nearly 20 per cent.

This baffling trend of rain has been explained in a study called "Weakening of Indian Summer Monsoon Rainfall due to Changes in Land Use Land Cover" undertaken by Interdisciplinary Programme in Climate Studies by the IIT-Bombay.

According to Dr Subimal Ghosh, lead author of the study, while monsoon is generally a product of large scale atmospheric circulation, local factors also play a role in its advance. "These include changes in land use and land cover that lead to

changes in monsoon rainfall, which are in our hands, and because of them there has been a significant reduction in rainfall over two major regions, the Ganga basin and northeast India," he says.

The study further found that both forest cover and monsoon rainfall declined considerably between 1980-1990

and 2000-2010.

The reduction in rainfall was especially pronounced in north and northeast India. The study's models also showed that the large-scale conversion of forests to crop lands had resulted in a decline in the process by which moisture is transferred from soil and plants to the atmosphere.

The study explained that when there is a huge conversion of forest to farmland, there is a reduction in leaf area index, decreasing evaporation of water through foliage. In forests, the vegetation is deep-rooted, which can easily extract soil water, but crops have shallow roots and are unable to extract water that easily.

Vagaries of Rain God

- ❏ The country has so far received 733.7 mm of rain as against the normal of 762.3 mm
- ❏ While Madhya Pradesh and Rajasthan have received nearly 25 per cent above normal rain, States like Gujarat, Punjab, Himachal Pradesh and parts of North-east have a deficit of
- nearly 20 per cent
- ❏ IIT Bombay study found deforestation, especially in north and North-east, has resulted in a decline in evaporation of water through transpiration from plant surface
- ❏ This in turn has lowered recycled precipitation that
- accounts for a quarter of rainfall during the last leg of the season, added the study
- ❏ The study explained that when there is a huge conversion of forest to farmland, there is a reduction in leaf area index, decreasing evaporation of water through foliage

Rajasthan Patrika ND 10.09.2016 P-04

इस बार आईआईटी की एक चौथाई सीटों पर किसानों के बच्चे

पत्रिका न्यूज़ नेटवर्क

rajasthanpatrika.com

कोटा. भारतीय प्रौद्योगिकी संस्थानों (आईआईटी) में इस साल किसानों के बच्चों की मौजूदगी ज्यादा है। दाखिले की दौड़ में शिक्षक और पब्लिक सेक्टर में काम करने वाले अभिभावकों के बच्चों को पछाड़ कर खेती करने वालों के बच्चे चौथे पायदान तक जा पहुंचे हैं। इतना ही नहीं ग्रामीण छात्रों की मौजूदगी भी इस बार एक चौथाई रहेगी। हालांकि आईआईटीज में शहरी छात्रों का दबदबा बना हुआ है। शहरों में रहने वाले 75 फीसदी छात्र आईआईटी में प्रवेश हासिल करने में सफल रहे। इस बार जेईई एडवांस परीक्षा का आयोजन आईआईटी गुवाहटी ने करवाया था। प्रवेश प्रक्रिया खत्म होने के बाद संस्थान की ओर से जारी आंकड़ों का विश्लेषण करने पर चौंकाने वाली बात यह सामने आई कि सरकारी नौकरी करने वाले माता-पिता के बच्चे आईआईटी, एनआईटी और ट्रिपल आईटी में सबसे ज्यादा सफल रहे हैं। इन संस्थानों में प्रवेश लेने वाले 36,566 छात्रों में से 10,200 के माता-पिता सरकारी नौकरी करते हैं। सफलता के पायदान पर दूसरा स्थान व्यवसायी माता-पिता का रहा। इनके 5814 बच्चों को तीनों संस्थानों में प्रवेश मिला है। प्राईवेट सेक्टर में नौकरी करने वाले अभिभावकों के 4,097 बच्चों को एडमिशन मिला।

Millenium Post ND 10.09.2016 P-06

HRD min working towards digital degrees, certificates

OUR CORRESPONDENT

NEW DELHI: In a bid to put a check on fake degree and marksheet incidents, the Centre is planning to roll out National Academic Depository (NAD) initiative from next year.

The depository plan would help in storing important documents such as school leaving certificates, marksheets, degrees, etc in digital form, which can be accessed by student as well as institutions at the time of need.

Giving a push to introduce the system, Union Human Resource Development (HRD) Minister Prakash Javadekar on Friday called upon all states to roll out the use of the depository in 2017.

The NAD, which is an initiative of the HRD Ministry to maintain a national-level database of all academic qualifications, is not new as the similar scheme was also announced by the then HRD Minister Kapil Sibal in 2010.

The NAD will facilitate online verification and easy

Giving a push to introduce the system, Union Human Resource Development (HRD) Minister Prakash Javadekar on Friday called upon all states to roll out the use of the depository in 2017

retrieval of academic records thereby removing the need to physically approach the educational institutions to obtain attestations of certificates.

The database would also help deal with issues of forged certificates since it enables online verification.

"Establishment of a National Academic Depository is a step towards the Digital India vision of Prime Minister NarendraModi. The securities depositories in the country have already made dematerialisation of the financial securities and have been ensuring the safety of the financial wealth of the investors," the HRD Minister said while speaking at an event organised to create awareness on NAD.

"This system can now be replicated for the educational awards. It is high time the academic awards are verified and authenticated, accessed and retrieved in a digital depository," he added.

The minister called upon all participants to resolve to target year 2017 to roll out use of depository and encouraged the institutions to change the mindset by welcoming technology in the form of NAD and make it a reality.

Javadekar emphasised on three things – change in mindset, absorbing 'tried, tested and trusted technology' and thus enhancing transparency and authenticity–to make it a reality.