Newspaper Clips
December 23, 2016

Economic Times ND 23.12.2016 P-08

New IITs Have Better Faculty-Student Ratio

**Sreeradha D Basu &
Prachi Verma Dadhwal**

Mumbai | New Delhi: The new IITs are largely faring better than the older ones in faculty-student ratio, primarily due to the advantage of smaller batch sizes.

The ideal faculty-student ratio for the Indian Institutes of Technologies is considered to be 1:10. Against this, the ratio for IIT Mandi is 1:8 — arguably the best across all IITs — with 104 faculty members for 810 students. IIT Ropar has 90 teachers for over 800 students, putting the faculty-student ratio at 1:9. At IIT Gandhinagar, it is about 1:10 while at IIT Indore and IIT Hyderabad the ratio is about 1:12.

In comparison, the older IITs have a lot of catching up to do. IIT Bombay, for instance, has a faculty-student ratio of about 1:14 while for IIT Delhi and IIT Kharagpur, it is about 1:16 and 1:19, respectively.

According to Rohin Kapoor, director at Deloitte, the older IITs have an estimated faculty shortage of 30-40% which is adversely affecting their PTRs (pupil-teacher ratios). "Newer IITs, on the other hand, have reported positive PTRs due to a variety of reasons, including planned faculty allocation, comparatively better physical infrastructure and lack of pressure on increasing intake capacity," said Kapoor.

Despite their more comfortable situation at the moment, the newer IITs are not slackening pace. "As we are growing, the need for faculty is growing too. We are aggressively trying to meet the de-

More the Merrier

Faculty-student ratio at these institutes ranges between **1:8 to 1:12**

As they scale up batch sizes, they are putting in place strategies so that recruitment of faculty keeps pace with overall pace of growth

New IITs are actively visiting and trying to identify potential faculty members from across the globe

They are also facilitating short-term faculty visits from industry & research to offer relevant short courses

mand for new faculty without compromising on the quality," said SK Das, director of IIT Ropar, which increased its faculty strength by 50% to 90 in the last 18 months.

Next summer, IIT Ropar will have over 1,200 students and plans to launch two departments. To tackle this, it has prepared a three-pronged strategy. Besides the normal screening of applications from candidates within India, it is also getting into online searches of candidates based out of India and a recruitment drive focused outside the country. "This spring (March), we are heading to Singapore, Japan, Australia and Korea. In the summers, like last time, we will visit Europe (France and Germany), Canada and the US," said Das. Last year, the institute sent a delegation on a talent hunt to the UK, Canada and northern part of the US.

IIT Mandi, too, is going all out to attract and recruit faculty members from across the globe. According to Bharat Singh Rajpurohit, dean (faculty) at IIT Mandi, the institute director and other faculty members take part

in forums, especially in North America and Europe, to interact with researchers/postdoctoral fellows, who can be potential faculty. The institute has already hired several faculty members working abroad by conducting interviews/presentation through video-conferencing.

Others are equally proactive. IIT Indore has 91 faculty members, and spokesperson Nirmala Menon said they are on the lookout for world-class researchers and scholars in diverse disciplines.

The director, functionaries and faculty members of IIT Indore look for the best researchers in different fields during their trips for conferences and meetings at different universities around the world. The institute also organises research talks and presentations, besides offering state-of-the-art labs and facilities.

IIT Gandhinagar has various methods of recruiting teaching talent, such as adjunct faculty, scholar-in-residence, visiting faculty, and so on.

Deloitte's Kapoor, however, said that given the remote location of

some of these new IITs, hiring and retaining quality faculty will be a challenge. "Funding research, exchange programmes, corporate secondments and other ways of engaging the faculty will be required in order to maintain their current above-average PTR," he said.

The newer IITs are already working on this aspect. IIT Mandi, for instance, offers a unique academic culture involving inter-disciplinary research and project-oriented teaching that attracts some of the brightest young faculty, said Rajpurohit, besides having amenities like a well-equipped residential campus, childcare centre and campus school.

"We have visiting researchers, short-term faculty visits from the best universities in the world. Last year, IIT Indore hosted 26 international faculty for short-term courses under the GIAN scheme," said Menon.

IIT Mandi has designed an academic structure that allows it to invite and accommodate short-term faculty from industry and research organisations. For this, it is utilising the National Knowledge Network and video-conferencing to offer specialised courses, including a few from foreign universities.

UB Desai, director of IIT Hyderabad, said the institute does not have a shortage of faculty, given that it has 170 faculty for 2,069 students. He stressed on the need to be proactive in contacting Ph.D. students close to graduation as also having frequent selection committee meetings.

"Fundamentally we are looking for excellence. After all we are an IIT," Desai said.

IITs seek review of fee concessions for special category students

http://economictimes.indiatimes.com/industry/services/education/iits-seek-review-of-fee-concessions-for-special-category-students/articleshow/56129101.cms

NEW DELHI: The country's premier technology institutes, the IITs, have urged the government to replace the policy of providing fee exemption for special category students with direct reimbursements by the government to such students, and replace fee waiver with interest free loans to economically weaker students.

The cost incurred on such students is "adversely affecting the financial viability of the institutions and eroding their corpus funds", Indian Institutes of Technology (IITs) said in a recommendation made to the government.

"We are not against the policy and the social welfare decision taken on fee waivers… We are just pleading with the government to reimburse the gap," said Indranil Manna, director at IIT-Kanpur.

IIT-Kanpur hosted the 155th meeting of all IIT directors that unanimously decided to send these proposals to the IIT Council — the apex coordination body for all the 16 IITs chaired by the union HRD minister.

IITs have recommended to the HRD ministry that wherever the government decides to give free education to any category of students, the cost of education for these students must be reimbursed to IITs. This can be done through the DBT (direct benefit transfer) system where HRD ministry or the ministry of social justice & empowerment fund students to pay IIT fees.

"Currently, 48.5% students at IIT undergraduate level don't pay fee and in fact receive merit scholarships from us. All we are saying is that the government and the relevant department should bear its cost and, in fact, directly address the issue with the student and the bank," Manna told ET. The HRD ministry had earlier this year announced a fee hike across IITs to Rs 2 lakh per year from Rs 90,000 starting 2017. The institutes said the fee hike will be offset by the concessions.

At present IITs provide complete exemption of tuition fee for SC/ST and physically disadvantaged students besides interest subvention on educational loans for all students whose annual household income does not exceed Rs 9 lakh for a period of five years. All this cost, including interest subventions, is borne by IITs through their internal accruals.

For economically disadvantaged students, the IIT have recommended 'only interest free loans' rather than full or partial fee waiver as is the current policy and replacing the 5-year interest subvention period with a 4-year one to coincide with the completion of the undergraduate course at IITs.

They have also recommended that the existing merit cum-scholarship schemes should be strengthened to provide scholarship to all eligible students from economically weaker sections. Directors from 15 IITs attended the Kanpur meeting held on December 12.

Rajasthan Patrika ND 23.12.2016 P-13

आईआईटी में आधे हुए 'करोड़ प्लस' पैकेज वाले

नई दिल्ली. देश का सबसे बेहतरीन इंजीनियरिंग टैलेंट देने वाले आईआईटी के छात्रों का पैकेज हमेशा आकर्षक होता है, लेकिन इस दफा स्थिति बेहद कमजोर है। 2014 के मुकाबले इस बार 1 करोड़ से ज्यादा पाने वालों की संख्या लगभग आधी रह गई है। बेसिक सैलरी, ईएसओपी (इंप्लॉयी स्टॉक ऑनरशिप प्लान), ज्वाइनिंग बोनस और रिलोकेशन अलाउंस आदि मिलाकर 1 करोड़ का आंकड़ा पार करने वालों की संख्या में 2015 के मुकाबले 40 फीसदी कम है।

इस साल बुरा है हाल

आईआईटीयंस को 1 करोड़ से ज्यादा पैकेज देने वाली इंटरनेशनल कंपनियों में इस साल सिर्फ ऊबर, माइक्रोसॉफ्ट और ओरेकल जैसी कंपनियां शामिल रहीं। इनमें से भी माइक्रोसॉफ्ट और ओरेकल ने इंटरनेशनल ऑफर्स में कमी की है।

ये रहे बड़े कारण

- अमरीकी कंपनियों के ऑफर्स में बड़ी गिरावट
- गूगल जैसी बड़ी कंपनी का कैंपस रिक्रूटमेंट से दूरी बनाना

उबर और ओरेकल ने कीं नियुक्तियां

- 2014 के बाद से फेसबुक ने भी आईआईटी से दूरी बना ली है
- इंजीनियर्स की डिमांड-सप्लाई में असंतुलन
- वैश्विक अर्थव्यवस्था में अस्थिरता

गोल्डन ईयर रहा था 2014

2014 के में सभी आईआईटी के लिए 1 करोड़ से ज्यादा के पैकेज के मामले में सबसे अच्छा रहा था। सभी आईआईटी को मिलाकर तब

60 से ज्यादा छात्रों को 1 करोड़ से ज्यादा पैकेज मिला था। 2014 में सीटीसी का अधिकतम आंकड़ा 2 करोड़ रुपए रहा था।

सभी आंकड़े लाख रुपए में हैं

स्टॉक (रु) ■			कैश कंपोनेंट ■	
155	124	77.5	83	80.4
फेसबुक	ओरेकल		ओरेकल	

Millennium Post ND 23.12.2016 P-06

IIT-B working with US scientists to predict storm surge

BHUBANESWAR: Researchers in climate science at the IIT, Bhubaneswar, are studying coastal inundation for developing a Land-Ocean-Atmospheric Modelling System to make prediction in case of extreme weather events, Prof U C Mohanty, Professor of Earth, Ocean and Climate Sciences at IIT, Bhubaneswar said.

With climate change and global warming triggering erratic and extreme weather events, the coastal states in India were vulnerable, he said on the sidelines of the four-day National Symposium on Tropical Meteorology (TROP-MET-2016) which concluded at SOA University yesterday. "The IIT-Bhubaneswar has

been working with a group of US-based scientists to develop such a model. This modelling will help improve the prediction on coastal inundation which is a major cause of loss of life and property in the coastal states," Prof. Mohanty, an acknowledged expert in climate science, said.

Prof Mohanty said the endeavour to develop the modelling system with the group of US-based scientists was crucial as climate change had altered the rainfall pattern. "We now receive a huge amount of rainfall within a short window of time followed by long dry spells. Besides, the rainfall and

storm surge during tropical cyclones seriously affects large shoreline populations causing destruction," he said. He said though the number of tropical cyclones in a season could remain the same, their category or intensity would be higher.

With global warming leading to sea level rise, inundation in a state like Odisha had to be studied, Prof Mohanty said, adding the storm surge on the southern coastline of the state from Ganjam district upto Visakhapatnam in Andhra Pradesh could be of 2-3 meters while a cyclone of the same intensity could whip up waves of 10-12 meters in the Balasore coast in the north. **AGENCIES**

Global push for IITs runs into financial hurdles

http://economictimes.indiatimes.com/industry/services/education/global-push-for-iits-runs-into-financial-hurdles/articleshow/56073945.cms

NEW DELHI: The Human Resource Development (HRD) ministry's grand plans under Project Vishwajeet to provide additional and preferential funding to select IITs to catapult them on global academic rankings has hit a financial hurdle. The financial uncertainty following Demonetisation has further put the future of 'Project Vishwajeet' under a cloud.

Reliable sources told ET that the Prakash Javadekar led ministry has not even been able to move the project to the Expenditure Finance Committee (EFC) for financial clearance due to the funds crunch.

It is quite unlikely that the project will pass muster in the current fiscal unless there is a change in the government's financial situation after December 31, sources indicated. The seven chosen IITs sought near Rs 22,000 cr in funding from the HRD ministry at the meeting for the new Project in October this year.

The IITs — Delhi, Bombay, Kanpur, Kharagpur, Madras, Roorkee and Guwahati— submitted detailed action plans to the ministry on expansion of infrastructure and research facilities. The HRD ministry's internal calculations are not even permitting a Rs 10,000 cr allocation over the next five years.

The ministry is learnt to be examining various other financial models including debt funding options through bond route to keep government funding at a minimum.

One of the options being considered is to bring in a 75:25 funding formula with the IITs pitching in the latter figure. It was agreed in the October 20th meeting to set up five state of the art research laboratories to match international facilities-- IITs and other Indian institutes typically lose out to other countries on the parameter of internationalisation.

Times Of India ND 23.12.2016 P-06

Engineering exam

The Central Board of Secondary Education (CBSE) conducts the JEE-Main for centre-funded institutions. More than 1.3 million students write this examination every year.

The top-rankers from JEE-Main are eligible to write the JEE-Advanced for the prestigious Indian Institutes of Technology (IIT). In the new system, students aspiring for the IITs will have to pass the nationwide common entrance test with high marks and take the JEE-Advanced.

These apart, a number of states conduct their own test. Others grant admission based on marks obtained in class 12.

Several private colleges have their individual entrance examinations. But "some of them, which are self-financed, charge high fees or sell seats in the name of management or NRI quota at a premium", a source said.

Only a handful of students crack the tough exams set for top colleges such as the IITs, leaving thousands of aspiring engineers to dash for private institutions, many of which are notorious teaching shops.

These colleges have become a magnet for mostly middle-class families in a country where an engineering degree is considered a ticket to a lifetime of fat pay cheques or jobs in the US.

Some of the private colleges admit students without basic talent and aptitude for engineering, affecting overall quality, the source said. Of the 737,000 graduates in 2014-15, only half found employment. Most of the students didn't meet expectations of companies offering jobs.

The proposal for a single, nationwide test is viewed as an attempt to streamline the dysfunctional education system. It was discussed at a recent meeting of officials from the HRD ministry and the All-India Council for Technical Education (AICTE), the regulator for engineering colleges. The council will issue regulations for the examination. Issues such as the number of times the examination would be conducted in a year and the minimum qualification marks are yet to be worked out.

A source said the AICTE is planning to conduct web-based counselling sessions for admissions to engineering colleges based on students' all-India ranking obtained in the entrance examination.

"States would be invited to join the counselling process to fill the seats in colleges under their jurisdiction," the source said.

The states will be able to prescribe their admission criteria, apart from the score in the entrance test. The JEE score will, however, be the minimum eligibility criteria, the source said.