International Seminar on Higher Education & Public Information System 3-4th July, 2014, India Habitat Center, New Delhi

The two-day International Seminar on Higher Education and Public Information System, inaugurated on July 3, 2014 at India Habitat Centre, Lodhi Road, New Delhi successfully culminated on 5th July, 2014. The International Seminar, which brought together prominent statisticians and policymakers from across the country and abroad, saw deliberations and discussions on the data collection mechanisms such as Administrative Surveys (AISHE) and Household Surveys, Classification of Educational Institutions as well as Educational Programmes and Student Portal.

The main objectives of the Seminar were -

- Sharing the importance of standardization of concept and definition of education statistics;
- Sharing and learning from international experiences of quality, coverage and use of education statistics;
- Managing student portal;
- Classification of Higher Education Institutions;
- Identifying the key issues on the concept, definition between administrative and household surveys on education statistics and identifying the next steps to harmonize the same;
- Making consensus among the different actors working/using education statistics on the concept, definition and other methodological issues.
- 2. The Seminar started on July 3, 2014 with the auspicious lighting of the traditional lamp by the dignitaries including Dr. T.C.A. Anant, Secretary and Chief Statistician of India, MOSPI, Mr. Agrawal, Mr. Shigeru Aayogi, Director and UNESCO Representative to Bhutan, India, Maldives and Sri Lanka, Mr. Rob Lynes, Director, British Council India and Mr. Tiwari.
- 3. In his address, Dr. Anant pointed out that the government uses statistics for development of policy as well as evaluation of their programmes and schemes. However, he added, that there were some gaps in many areas in statistics related to Higher Education (HE) in India. To overcome the problem of under-reporting of statistics by institutions to the regulatory bodies, Dr. Anant suggested that the compliance issues can only be dealt with through legislative support. He even suggested bringing the AISHE under the framework of the Collection of Statistics Act (2008) to ensure effective and wider collection of statistics.
- 4. Speaking before him, Mr. Agrawal said that though India was well on its way to achieve the desired number of HE Institutions, a lot of emphasis was required on collection of good data in this sector. He said that now that the Ministry had started its All India Survey on Higher Education (AISHE), the next step should be making further progress in this direction, as well as providing that information to the students.

- 5. In his address, Mr. Aayogi called the seminar an important and timely event while adding that the HE sector is facing a lot of challenges in the country, especially since the demand for HE has increased manifold in the past two decades. Speaking about the Higher Education Qualification Framework (HEQF), Global University Rankings and University Rankings within India, he said that UNESCO would be happy to collaborate with the Ministry of HRD in achieving the desired level of success.
- 6. Beginning his address at a lighter note, Mr. Lynes said that he was impressed with the statistical presence of India on the world map. To prove his point, he pointed out that in the next two years, 25% of the international workforce would be from India. Moving on to more serious issues like international student mobility, institutional partnerships and faculty exchange, he said that there has been significant development in the last three decades, which needed to be viewed from a statistical point of view. He also hoped that Seminar would form a start of a new collaboration between India and the UK for collecting, compiling and using big data on education, specially Higher Education.
- 7. Dr. Pranob Sen, Chairman, National Statistical Commission delivered a key note speech on need & use of Statistics for Planning & Policy making. He also emphasized the need for longitudinal Survey and the caution to be taken while conducting such surveys.
- 8. The Valedictory session for the event was chaired by Mr. Ashok Thakur, Secretary, Higher Education. He was joined on the dais by a host of dignitaries including Mr. Pawan Agrawal, Advisor, Planning Commission, Ms. Manjula Rao, Assistant Director, British Council, Mr. Shailendra Sigdel, UNESCO-UIS, Prof. Furqan Qamar, Secretary General, Association of Indian Universities (AIU) and Mr. B.N. Tiwari, Deputy Director General, Statistical Division, Ministry of HRD. The Seminar was organised by the Ministry of HRD, Planning Commission and UNESCO.
- 9. Stressing upon the importance of statistics, Mr. Thakur mentioned that under Ministry's Rashtriya Uchchattar Shiksha Abhiyan (RUSA) statistics have become an important tool for taking the programme ahead. Under the scheme, each State Government as well as Higher Education institution is expected to not only participate in the survey but schemes are being proposed/approved on the basis of the statistics thrown up by the All India Survey on Higher Education (AISHE). He congratulated the participants of the Seminar, while especially commending the efforts of the Statistical Division of the Ministry, the Planning Commission and the UNESCO for organizing "a useful Seminar."
- 10. Emphasizing upon the relevance of survey exercises like the AISHE, the Secretary said that these exercises are very important because they help the administration do course-correction regarding schemes for improvement of HE. He admitted that as far as India is concerned, the data collection in HE is a huge task because of the size of this sector in the country. He added that to keep pace with this huge growth in HE sector, a phenomenal exercise has been undertaken under AISHE which has become an important project of the Ministry.
- 11. Talking about the presence of as many as 13 regulators in the sector of education, right from the UGC, the AICTE, the Medical Council of India, the Bar Council of India, etc., Mr. Thakur said that since each body has been created by an Act of Parliament, it is difficult to coordinate the efforts of

these regulators. He insisted that we need to have a mechanism to bring all of these bodies together for a more coordinated effort and programmes like AISHE are important because they bring them together. Responding to the deliberations that took place during the course of the Seminar, Mr. Thakur pointed out that the government should focus on collecting basic data and the non core position regarding student enrolment, education quality, etc. could be made optimal. In this regard, he exhorted the Association of Indian Universities (AIU) to help AISHE & get data from all Universities.

ALL INDIA SURVEY ON HIGHER EDUCATION

Ministry of Human Resource Development Department of Higher Education 3rd July, 2014

BACKGROUND

- All India Survey on Higher Education initiated in 2011.
- Year-wise Database on higher education is developed by collecting data from all the Higher Education Institutions (approximately 50,000).
- The survey is being conducted through electronic mode for which a centralized portal (www.aishe.gov.in) has been developed wherein each Institution has to register and upload the data.
- The Survey has reduced time-lag in availability of Statistics to the bare minimum.
- All the Institutions of Higher Learning (i.e. all institutions offering courses or programmes of Study of a duration of 9 months or longer, leading to a Degree, Diploma or other awards) are covered.

SALIENT FEATURES OF AISHE

- Pre-filling of Data from previous survey year
- Dynamic DCF
- Mass e-mailing
- Updation of Directory
- Automatic report generation
- Customised Reports
- Availability of Unit Level data
- Provision of Remuneration for Institution's Nodal Officers
- Actual Form uploaded by the Institution can be seen by the Institution itself and all concerned officers in the hierarchy
- No boundary of time & place
- No Manual Compilation at any level

ITEMS OF DATA COLLECTION

- Institutions' Basic Details
- Teachers Detail
- Details of Non-Teaching Staff
- Programmes conducted under various Faculties & Departments
- Students enrolled in these Programmes
- Examination results (Out-turn) of terminal year of each Programme
- Financial Information such as Receipts and Expenditures under various heads
- Infrastructure, Scholarships, Accreditation

DATA COLLECTION MECHANISM

- Registration on the Portal.
- Authentication by respective levels
- Approval Mechanism
 University Registration by MHRD/ SNO
 College Registration by University/ SNO
 Stand-Alone Registration by concerned regulatory bodies in the State/ SNO
- Nodal Departments in each States/ Institutions for coordinating the survey and uploading the data
- Data collection Mode
 e-Form to be downloaded, filled and then uploaded on portal

HARMONISATION OF DATA

- Unique code given to each Institution under AISHE
- Other Data Collection Agencies including Regulatory
 Bodies were requested to include AISHE Institution code as
 a field in their format
- Linking of data with Policy making
- Steering Committee for addressing all technical and other related issues on higher education statistics & public information system.
- Working Group for addressing all technical and other related issues of AISHE
- Unique DCF reference number

AISHE Portal





Standardization of concept and definition in Higher Education Statistics



United Nations Educational, Scientific and Cultural Organization



Shailendra Sigdel

Statistical Advisor for South Asia UNESCO Institute for Statistics UNESCO New Delhi s.sigdel@unesco.org www.uis.unesco.org

Importance of Standardization of concept and definition



What are the basic norms to be followed

- Calculation of indicators:
 - GER 5 or 6 years ? Entry age is different
 - GPI (adjusted)
 - Graduation rate- exam Vs target, which age population ?
- Definition of 'terms'
 - Mobile (international/foreign) student ?
 Is it based on citizenship ?
 - Estimation (enrolment ?)



Definition or 'term' used

- Higher Education/ Tertiary education
- Private / Public
 - Ultimate control is decided with reference to who has the power to determine the general policies and activities (UOE manual – Volume I)
 - Institutions, which are managed by an Individual, Trust, Society or Other Private Organization and receive/no receive regular maintenance grants from government or Local Body.

Definition or 'term' used

- TEACHING STAFF
 - Teaching and non teaching
 - Person working on Laboratory in technical vocational institute is teaching or non teaching?
 - Full time and part time (?)
 - How to measure part time (FTE)

Faculty- Fields of education

02 Arts and humanities	021 Arts	0211 Audio-visual techniques and media production 0212 Fashion, interior and industrial design 0213 Fine arts 0214 Handicrafts 0215 Music and performing arts
	022 Humanities (except languages)	0221 Religion and theology 0222 History and archaeology 0223 Philosophy and ethics
	023 Languages	0231 Language acquisition 0232 Literature and linguistics

SCHOLARSHIP

- Only government only
- Private also ? How to monitor ?



Higher Education in Asia:

Expanding Out, Expanding Up

Prof. N. V. Varghese,

Director, Center for Policy Research, NUEPA

nv.varghese@nuepa.org

Shailendra Sigdel

Statistical Advisor for South Asia UNESCO Institute for Statistics UNESCO New Delhi

s.sigdel@unesco.org

www.uis.unesco.org

HIGHER EDUCATION IN ASIA: Expanding Out, Expanding Up



The rise of graduate education and university research



United Nations Educational, Scientific and Cultural Organization

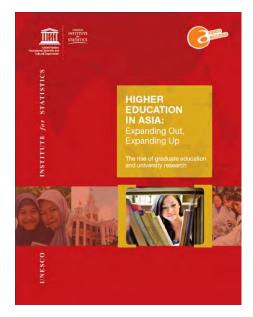








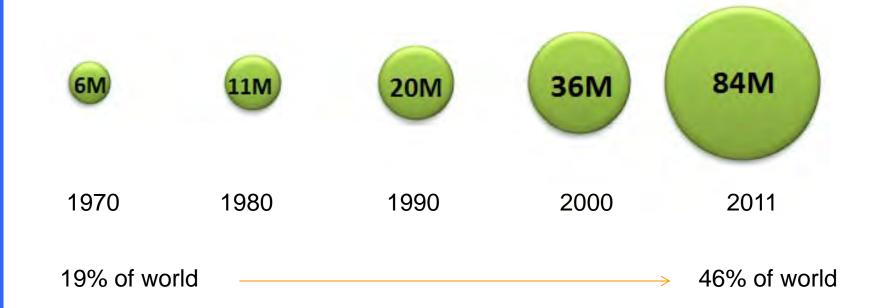
UNU-IIST International Institute for Software Technology





Explosive growth in Higher education enrolment in Asia

Higher education enrolment in East, Southeast and South Asia





Features of this new publication

- Look into the emerging trends after "expanding out"
 - The rise of graduate education and university research
- Target middle-income countries
- Present diversity of data and underlined data can be extracted online
- Joint efforts by four international institutions UNESCO (UIS and IIEP), UNU-IIST and Elsevier and by 13 authors



Purposes

- Describe extent & reasons for the expansion of undergraduate and graduate education
- Clarify key actors perceive a tension between expanding out and up
- Examine how universities gauge quality of graduate education and actions taken to raise quality
- Identify research strength, productivity and international collaboration: both national and institutional
- Highlight continuing issues that education leaders face in expanding educational opportunity, ensuring quality and promoting university research



Organization of the whole report

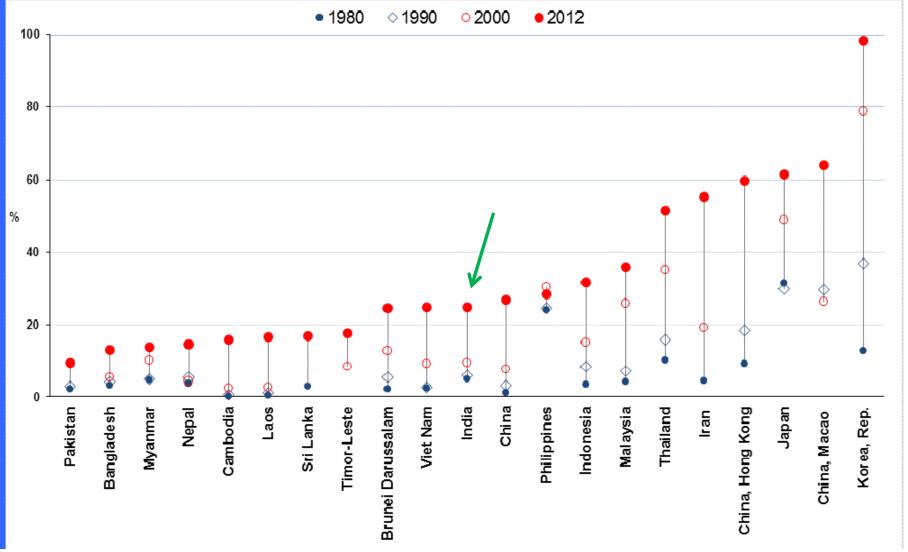
- The reshaping of higher education across Asia
- What are the system-level dynamics? Case study of Malaysia & Thailand
- Does university-based research really lead to national economic development?
- University research productivity across Asia
- Conclusions

Table of content

- Ch1 The reshaping of higher education across Asia
- □ Ch2 What are the system-level dynamics?
 - Case study of Malaysia and Thailand
- Ch3 Does university-based research really lead to national economic development?
- Ch4 University research productivity across Asia
 - International university ranking systems: How do they compare?
 - Looking for research excellence in the right places
 - International scientific collaboration
- Ch5 Conclusions



Gross enrolment ratio for higher education by country/territory, 1980-2012



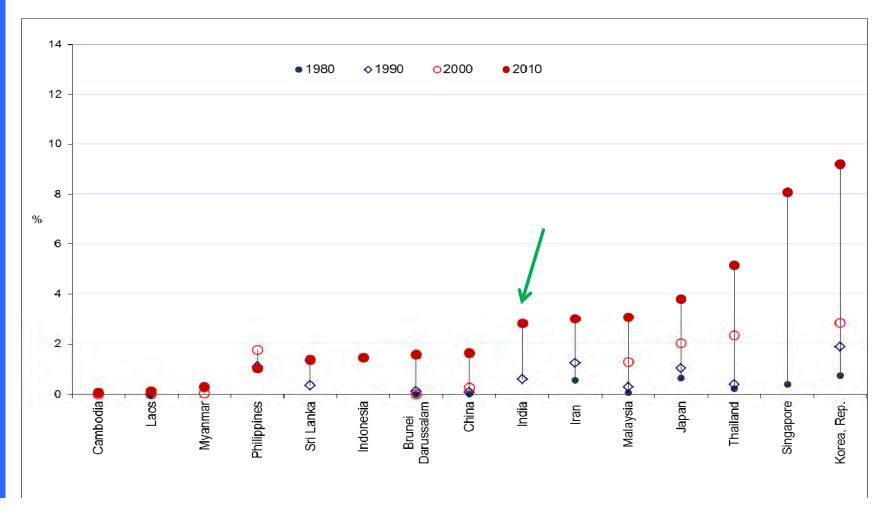


Cultural Organization

Expanding up:

Increase in participation in graduate programmes

Gross enrolment ratios for Master's and doctoral programmes by country or territory, 1980-2011



Share of Bachelor, post graduate and Ph. D. (AIHES 2010-11)



Cultural Organization

Bachelor : 82.3%

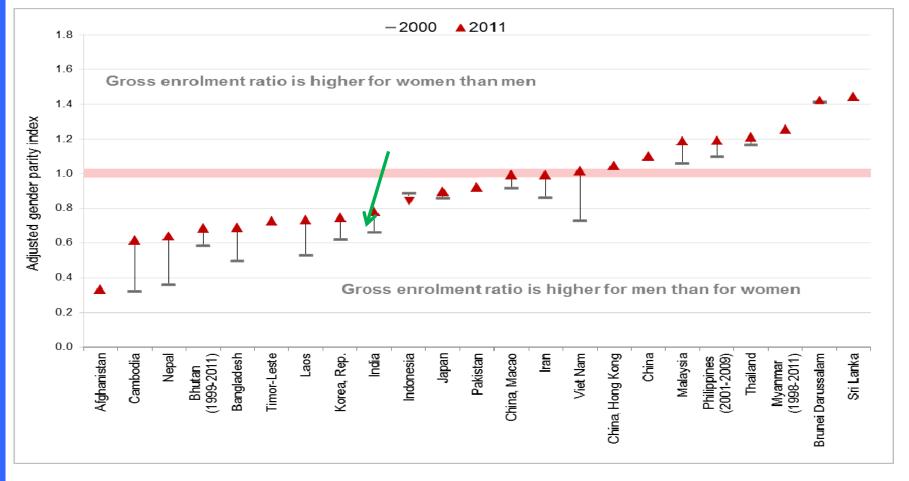
Post –graduate : 16.7 %

Ph. D: 0.8%



Gender equity in access to higher education has improved

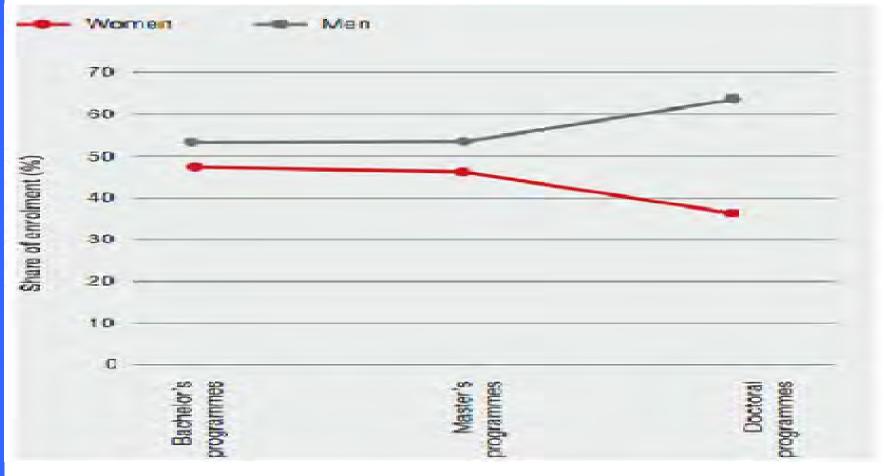
 Adjusted gender parity index for higher education gross enrolment ratios by country or territory, 2000 and 2011





Less women move up the education ladder than men counterparts

Proportion of female and male enrolment by type of programme in Asian countries, 2011



Share of women in Bachelor, post graduate and Ph. D. enrolments



Cultural Organization

(AIHES 2010-11)

Bachelor : 42.5%

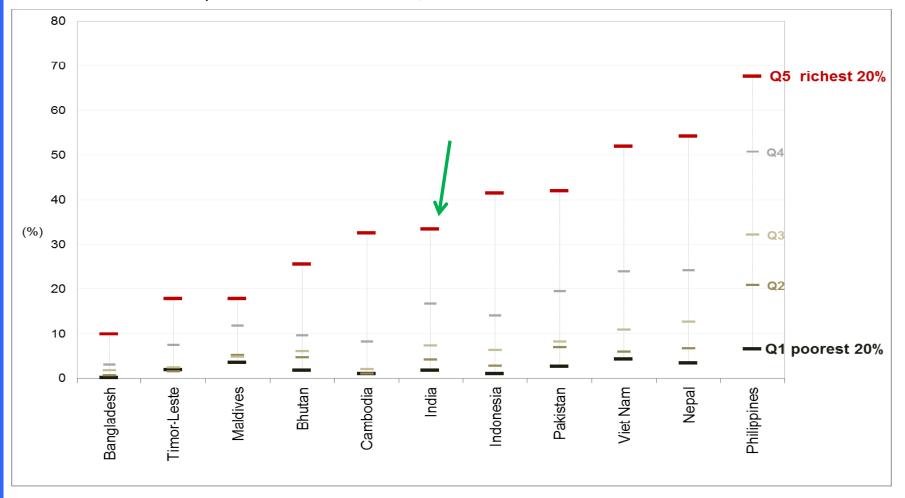
Post –graduate : 42.7 %

Ph. D: 39.9%



Disparity in wealth-related inequalities in access remains wide

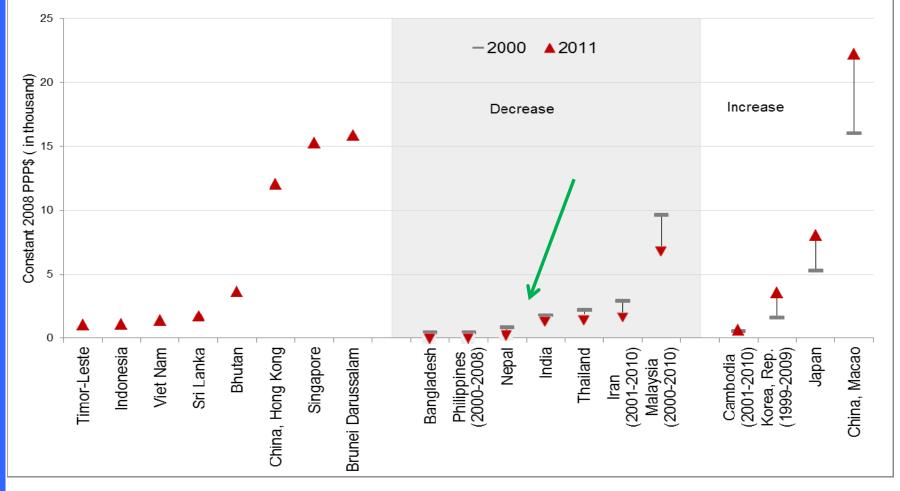
- Percentage of the population aged 20 to 24 years who have attended higher education by
- Household wealth quintile in selected countries, 2003-2011





Public funding has not kept pace

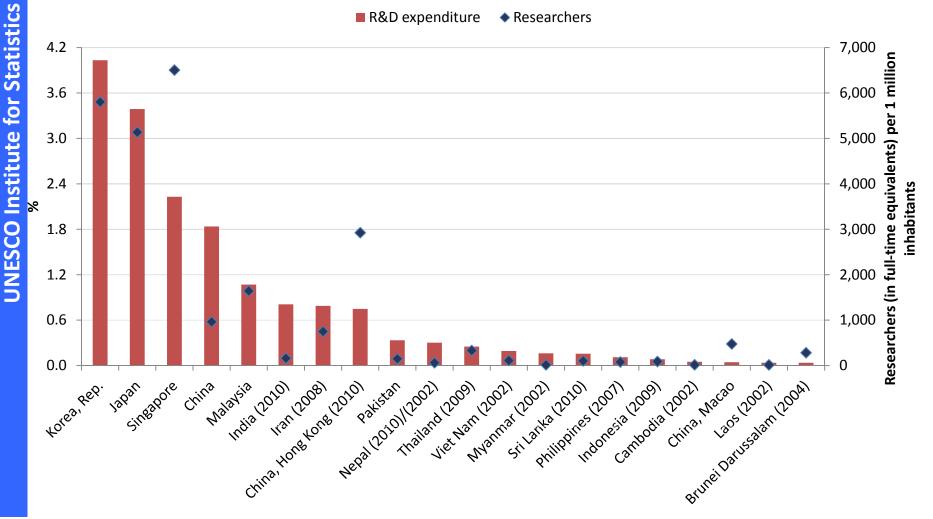
Public expenditure per higher education student by country or territory, 2000 and 2011





What do the data tell us?

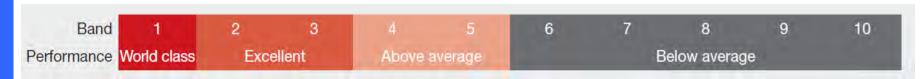
R&D expenditure as a percentage of GDP and researchers per 1 million inhabitants, 2011 (or the most recent year)





Purpose and methods of Ranking universities

- Rankings operate at the institutional level, often failing to recognize significant pockets of excellence.
- The Global Research Benchmarking System initiated by United Nations University (UNU) provides objective data and analyses to benchmark research performance in 15 broad and 251 niche subject areas of Science and Technology





Indian universities whose research performance achieved a

Institutions

Indian Institute of Science

Indian Institute of Technology Roorkee

Indian Institute of Technology, Bombay

Indian Institute of Technology, Delhi

Indian Institute of Technology, Kanpur

Indian Institute of Technology, Kharagpur

Indian Institute of Technology, Madras

Panjab University

Subject Areas

Chemistry

Computer Science

Earth and Planetary Sciences

Engineering

Environmental Sciences

Materials Sciences

Mathematics

Physics and Astronomy



Summary and conclusions

- Higher education systems in Asia have expanded up (graduate education) in response to
 - growth of undergraduate enrolment (expanding out)
 - demand for more research
 - high university rankings
- Pockets of excellence are found across a wide range of universities, not just in those near top in world rankings
- One common strategy to improve university research quality and output is through international collaboration



Cultural Organization

Thank you!

- A PDF copy of the report can be downloaded from
- http://www.uis.unesco.org/Library/Documents/higher-education-asia-graduateuniversity-research-2014-en.pdf
 - Please address questions and comments to:
 - Shailendra Sigdel
 - <u>s.sigdel@unesco.org</u>
 - Chiao-Ling Chien
 - □ cl.chien@unesco.org
 - Montjouridès, Patrick
 - p.montjourides@unesco.org
 - □ Tran, Hélène
 - □ h.tran@unesco.org
 - Said Voffal
 - <u>s.voffal@unesco.org</u>

National Information System on Agricultural Education Network in India (NISAgENet)

An ongoing activity of Education Division of ICAR

Dr. Sudeep Marwaha

PI & Senior Scientist

Indian Agricultural Statistics Research Institute Library Avenue, Pusa, New Delhi - 110012



Background

- DARE/ICAR being the regularity authority for higher education in Agriculture sector, ICAR initiated the NISAGENET started in the year 1995.
- National Statistical Commission in the year 2002 (DO. No. F12-11/98-Stat dated 11th June 2002) has recommended to build national level information system on higher education.
- In order to comply with this requirement, NISAGENET system was rebuilt to meet all the requirements.
- It is the first national level information and management system to capture higher education statistics that is implemented at the national level.



NISAGENET

NISAGENET web portal is available at:

http://www.nisagenet.iasri.res.in

The system has capabilities for:

- > On-line data collection- entry/updating
- > Uploading of documents to Server
- > Data integration at country level
- > Country/State/University/College level Dynamic Reporting

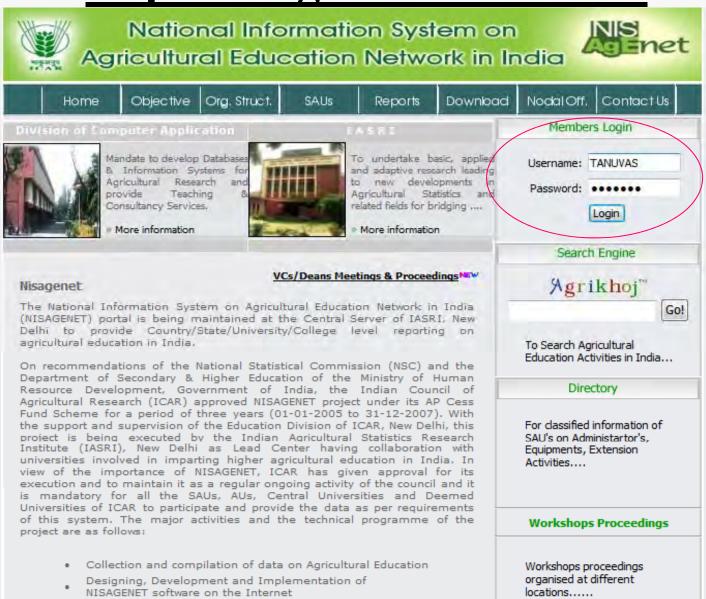


NISAGENET

- ➤ In view of the importance, utility and capabilities of NISAGENET, ICAR has made it a regular ongoing activity of the Education Division of ICAR
- > Participation is mandatory for
 - o All AUs (64) along with
 - o Constituent (334)
 - o Affiliated Colleges (234)
 - o Central University (1) and DUs (4) of ICAR



Home Page http://nisagenet.iasri.res.in/



Country/State/University/College level reporting



Focus of NISAGENET

Focus on maintaining an updated data base for providing support and taking decisions on important aspects like:

- **≻**General Administration
- >Academic Management
- **►Manpower Planning**
- **►**Infrastructure facilities
- >Budget planning and
- ➤ Management of Research and Extension activities

at the AUs and country level

Information Base of NISAGENET

- 1. Academic Information Schedule I
- 2. Infrastructural Facilities Schedule II
- 3. Budget Information Schedule III
- 4. Manpower Information Schedule IV
- 5. Faculty Profile Schedule V
- 6. R&D Activities Schedule VI



Academic Information : Schedule - I

- **✓** General Information of Universities & its Colleges
- **✓ Details About Administrative Heads**
- **✓** Discipline wise UG/ PG Programs at AUs/Colleges
- **✓ Strength of Students**
- **✓** Training Programs at SAUs
- **✓ Mode of Admissions**
- **✓** Scholarships / Reservations
- **✓** Placement Cell etc.



Infrastructural Facilities: Schedule - II

- **✓** Laboratory Facilities
- ✓ Major Equipments and Machineries
- **✓** Lecture Rooms
- ✓ Sports/Cultural Facilities
- ✓ Library Facilities
- **✓** Medical Facilities
- **✓** Hostel/Guest House Facilities



Budget: Schedule - III

- **✓ Receipts from Different Sources**
- **✓ Source-Wise Income of University**
- **✓** Allocation of Funds
- **✓ Details of Budget Expenditure**



Manpower: Schedule - IV

Gender & Category wise Sanctioned, In Position & Vacant Positions

- **✓ Status of Faculty Members**
- **✓** Status of Technical Staff
- **✓ Status of Administrative Staff**
- ✓ Status of Supporting /Auxiliary Staff



Faculty Profile: Schedule - V

- **✓** Background Information of Faculty Members
- **✓** Academic Details
- **✓** Service Particulars
- **✓ Training Programmes Attended**
- **✓** Publications
- ✓ Agri. Varieties / Packages of PracticesDeveloped
- ✓ Awards and Achievements



R&D Activities: Schedule - VI

- **✓ Ongoing Research Projects**
- **✓** University Academic Achievements
- **✓** University R&D Activities
 - Workshops Seminar/Conferences Organised
 - Summer/Winter Schools
 - Field Demonstrations
 - Women Training Programs
 - Kisan Melas
 - Adhoc Training & Others
- **✓ University Publications**
- ✓ Technologies/Varieties Developed



Management Requirements

- ➤ Year, Sex, Category wise Faculty manpower status for the AUs and their respective Constituent/Affiliated Colleges
- Intake Capacity of Students at UG/PG level
- Courses Offered at AUs & their Constituent/ Affiliated Colleges
- Year-wise strength of Admitted/Passed students
- Year-wise Budgetary provisions
- > Administrators Details
- > Others.....



Responsibility of Nodal Officers

- Collection and compilation of the data from all the affiliated Departments /Sections of the University/Colleges
- ➤ Reliability of the Quality and Quantity of the data entered into the system

➤ Regular data entry/updating and uploading of data to NISAGENET



Operational Architecture of NISAGENET

- ➤ The architecture of NISAGENET is so designed that participating organizations are able to have direct access to IASRI Server for updating / uploading the data of their respective University/Colleges
- ➤ For Data Management secured UserId and Passwords have been made available to all the Universities



Operational Architecture....

- ➤ The Nodal Officer at each AU can enter data of all Constituent/Affiliated Colleges
- ➤ However the activity may be shared by officials at different Constituent/ Affiliated colleges of the university
- The Nodal Officer himself can generate UserId and Password for each college
- Data can be updated directly from a college to the central server



NISAGENET Data Acquisition Process

Phase 1 Activities – At IASRI

- Release of Data Entry Mechanism (DEM) for the academic year by May 30. This mechanism will be mailed to all Nodal Officers and will also be available from the NISAGENET web site.
- The DEM will have schedule wise data items along with As On Date (AOD) and Data Entry Dates (DED).
 - As On Date is the date up to which the data holds good.
 - Data Entry Date is the date up to which that particular data item is to be entered by the Nodal Officer in NISAGENET.
 - For example, there is a form that requires total number of students in a university/college as on 31st March and should be entered on or before 30th April. In this case, DED is 31st March and AOD is 30th April.
- The mechanism also allows to mention the name of the university official with designation that holds the information for each data item/schedule.
- The mechanism contains a follow up process consisting of series of dates on which reminders need to be send to various university authorities by NISAGENET team and ICAR.

Phase 2 Activities – At University Level

- All the universities follows the standardized uniform procedure of data entry in the NISAGENET system as per the data entry mechanism for the academic year released by IASRI.
- The Nodal Officer records the name of the concerned official responsible for providing the information for each data item.
- The Nodal Officers have created a process in the university so that the concerned section officer will send the information to the Nodal Officer as per the AOD dates mentioned against each data item of various schedules.
- The Nodal Officer will collate all the data items as per the schedules and will enter it in the NISAGENET system before the DED date.

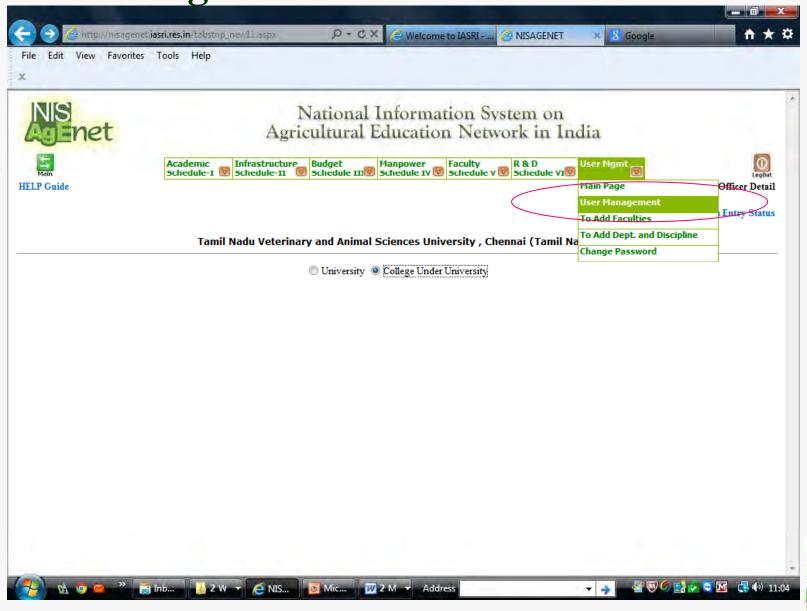


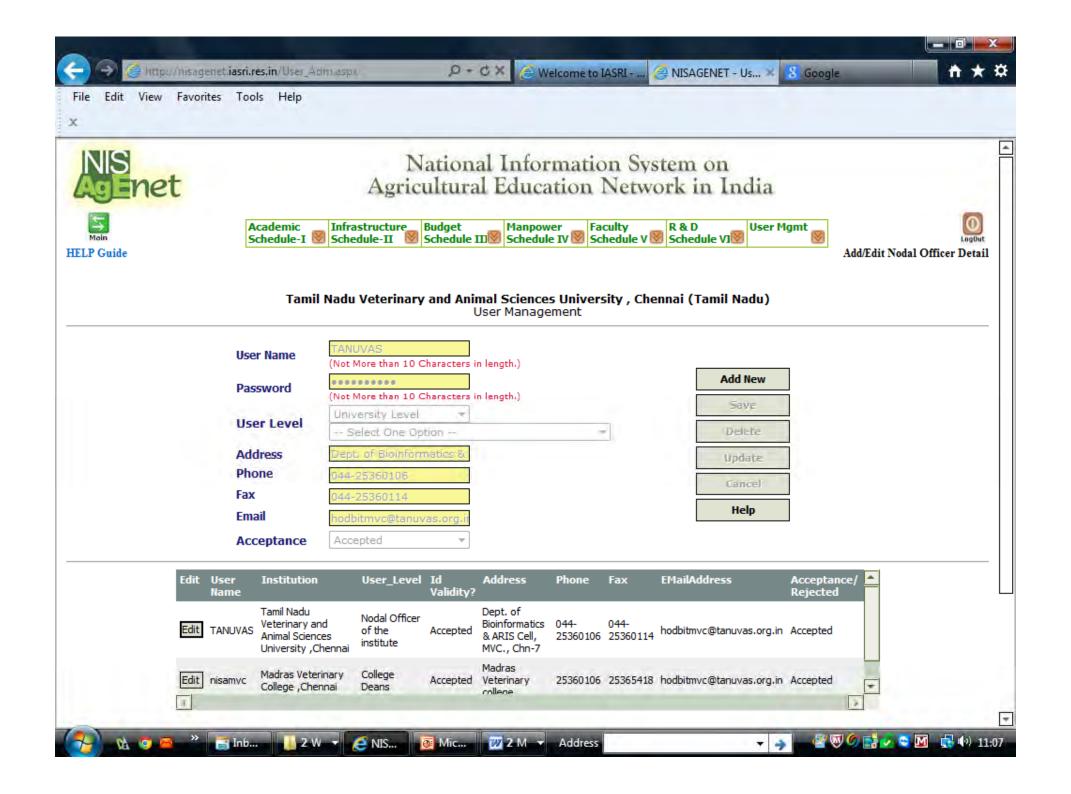
Phase 2 Activities – At University Level

- The Nodal Officer will also arrange the following meeting to ensure the smooth data entry process:
 - At least three meetings annually (First Level)
 - Chaired by the Nodal Officer or any other officer higher than the Nodal Officer.
 - The agenda will be to discuss and sought out any issues related to data items so that these can be entered before the DED.
 - At least two meetings annually (Second Level)
 - Chaired by the officer of the rank Registrar/Pro VC before the dates mentioned in the column Reminder No.4 from ADG to Vice Chancellor.
 - The agenda will be to discuss the issues with section officers those failed to provide the information before DED.
 - At least one meeting chaired by the VC (Third Level)
 - The meeting may be attended by the Higher authorities of University
 - The agenda will be to ensure full proof data entry in the NISAGENET system.
 - The Nodal Officer should present the data/data entry process
 - Once a year, in the month of April, the Nodal Officer should prepare a one page report of these meetings and send it to PI, NISAGENET through email.

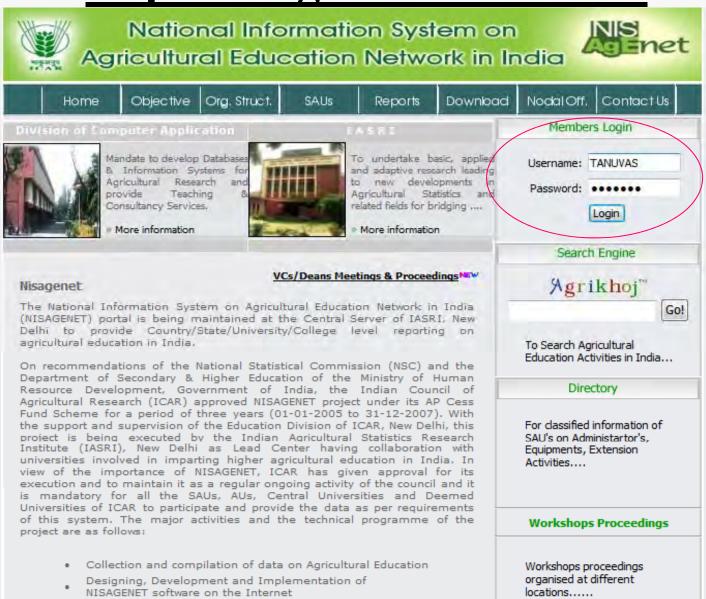


College Level UserId & Password





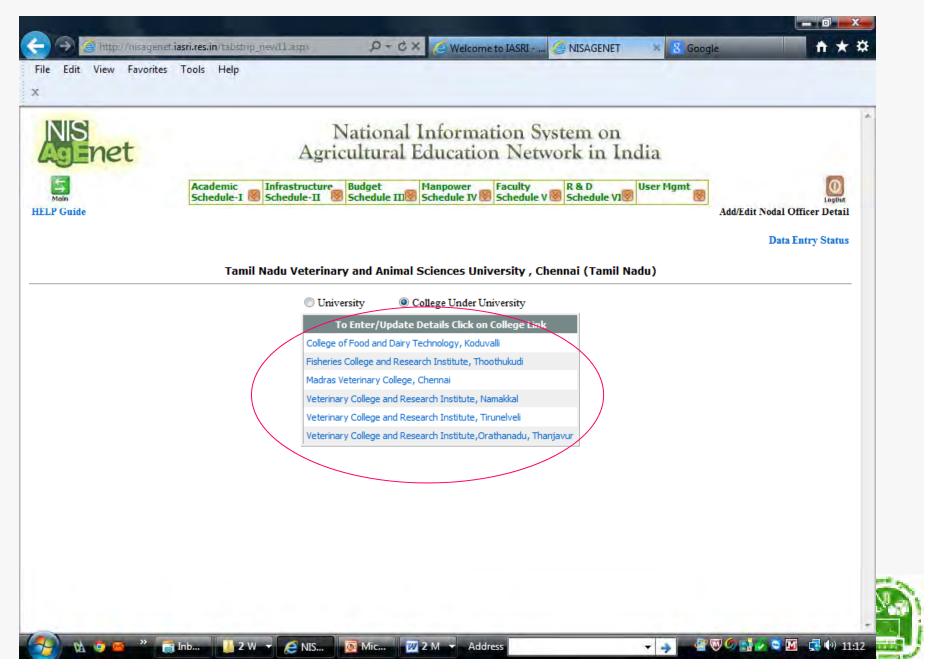
Home Page http://nisagenet.iasri.res.in/



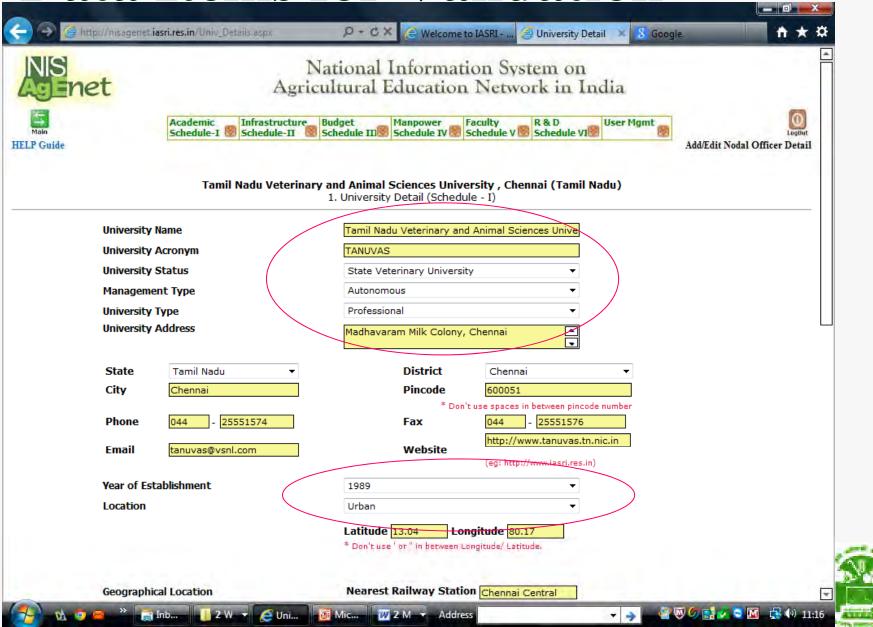
Country/State/University/College level reporting



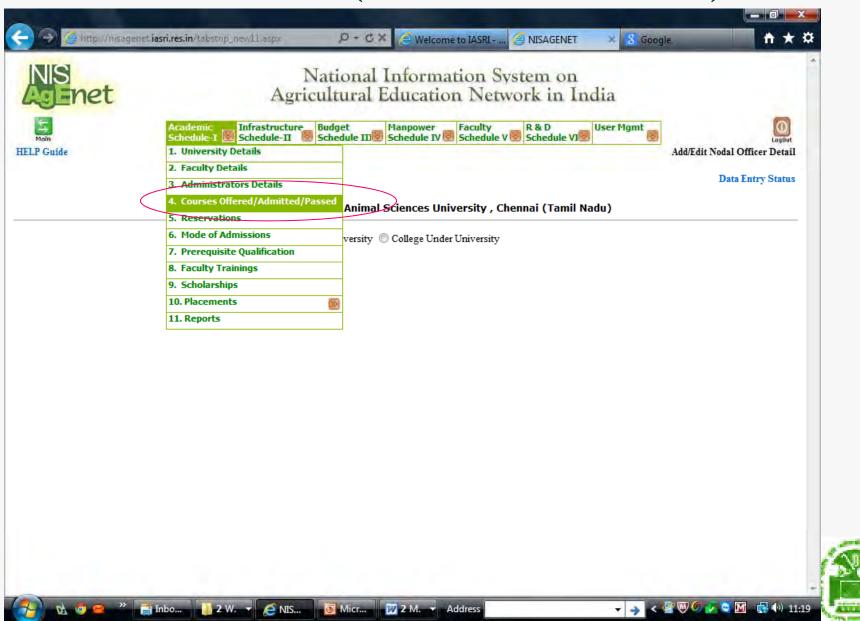
University Home Page for data management



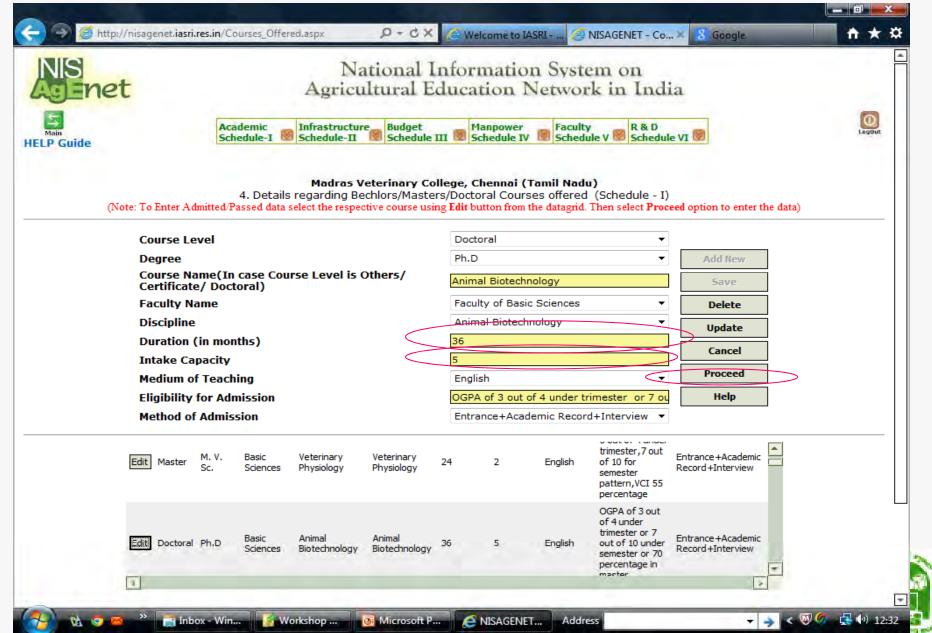
Data Items for Validation



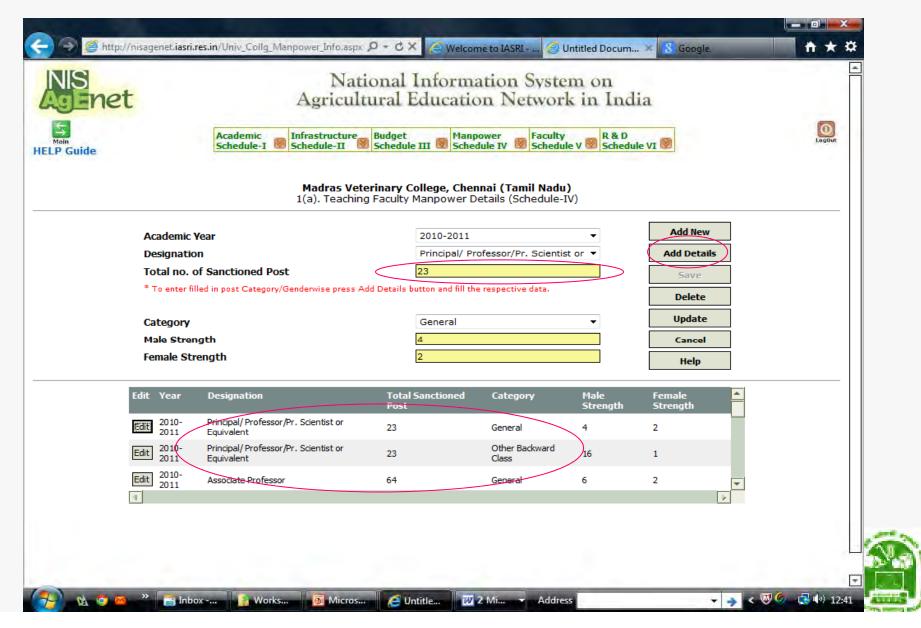
Courses Offered (Admitted/Passed) data

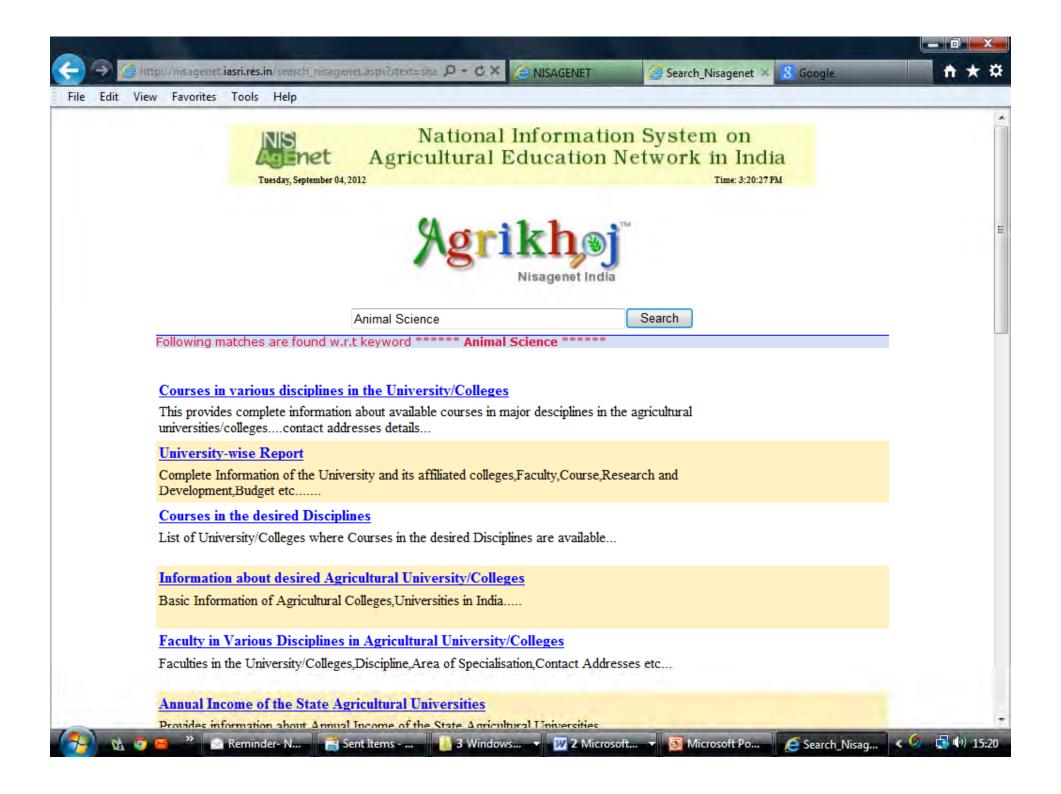


Courses Offered.....



Teaching Faculty Manpower.....





New Functionalities

- >Advance Database Reporting
- It is used to select the data from database
- *≻***User Logging**
- It display the last login time and date of user
- > Faculty Profiles
- It create a profile for each faculty for edit, update and display information.



Advance Database Reporting(1-3)



National Information System on Agricultural Education Network in India



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HELP Guide

Add/Edit Nodal Officer Detail

Last Login Date: 07/01/2014 Last Login Time: 11:30 AM

Advance Database Reporting

Data Entry Status

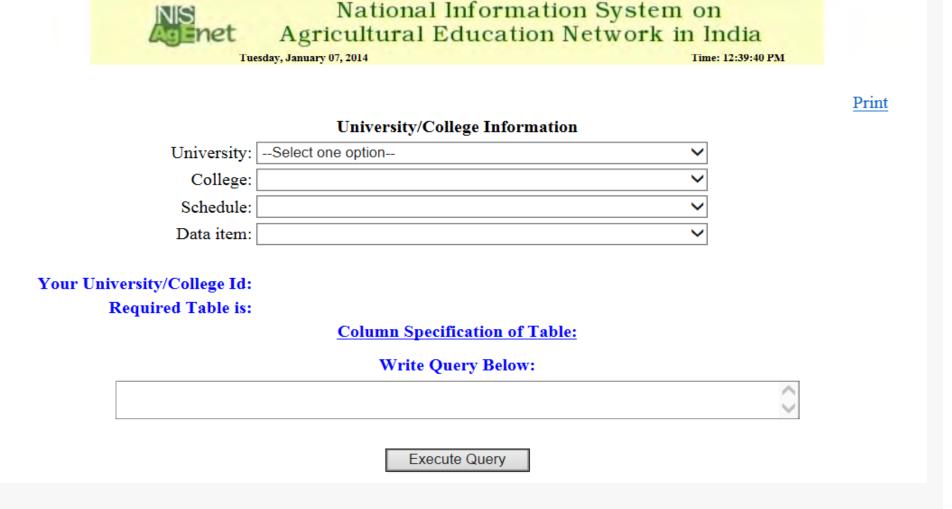
University Data Validation

Assam Agricultural University, Jorhat (01)

○ University ○ College Under University



Advance Database Reporting(2-3)





Advance Database Reporting(3-3)



National Information System on Agricultural Education Network in India

Tuesday, January 07, 2014

Time: 12:41:55 PM

Print

University/College Information

University:	Assam Agricultural University, Jorhat (Assam)	~
College:	University Only	~
Schedule:	Academic (Schedule1)	~
Data item:	Facultty Information	~

Your University/College Id: 07-00

Required Table is: ver3 Faculty Details view

Column Specification of Table:

University_College_Id (char), Faculty_Discipline (varchar), Head_of_Faculty (varchar), Address (varchar), State (nvarchar), District (nvarchar), Phone (varchar), Fax (varchar), Email (varchar)

Write Query Below:

select Faculty_Discipline,Head_of_Faculty from ver3 Faculty Details view

Execute Query

Convert to Excel

Faculty_Discipline	Head_of_Faculty	_
Agriculture	Dr P.Venkateswara Rao	
Home Science	Dr. T.V. Satyanarayana	
Agricultural Engineering	Dr. T.V. Satyanarayana	
	D. MIARCHMINADAVANA	



User Logging



National Information System on Agricultural Education Network in India







HELP Guide

Add/Edit Nodal Officer Detail

Last Login Date: 07/01/2014

Last Login Time : 11:52 AM

Data Entry Status

Advance Database Reporting

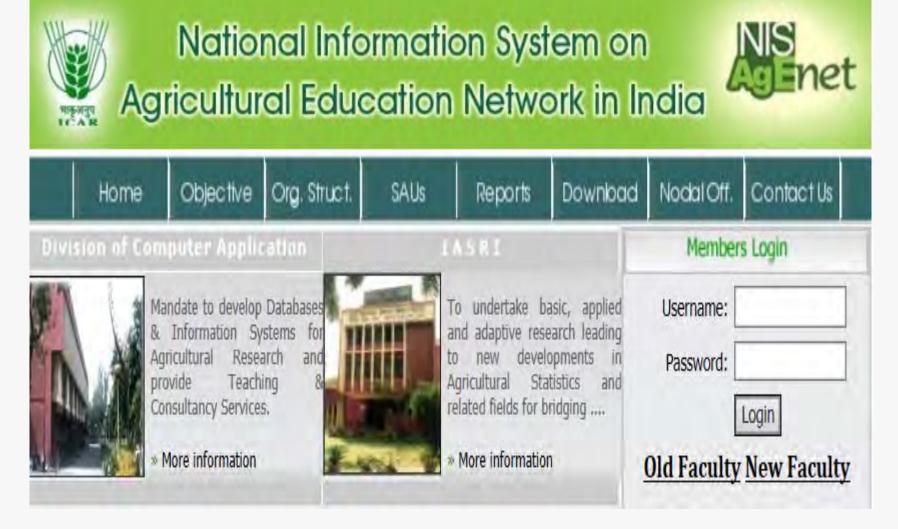
University Data Validation

Assam Agricultural University, Jorhat (01)

○ University ○ College Under University

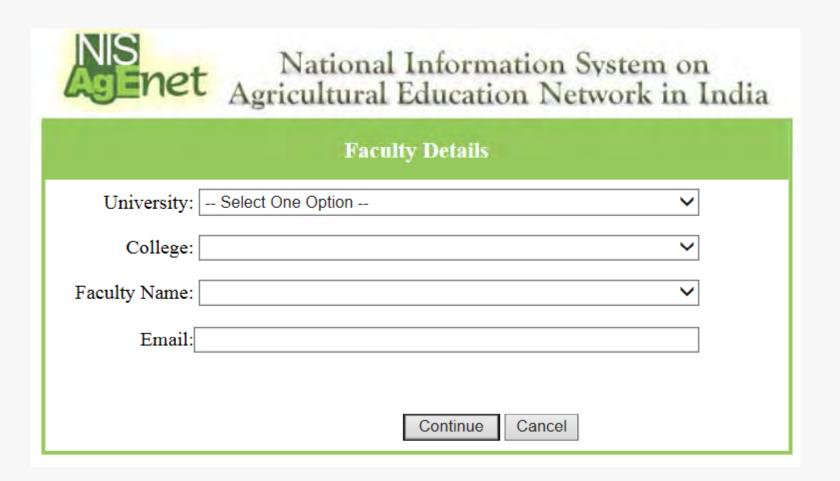


Faculty Profiles (1-4)



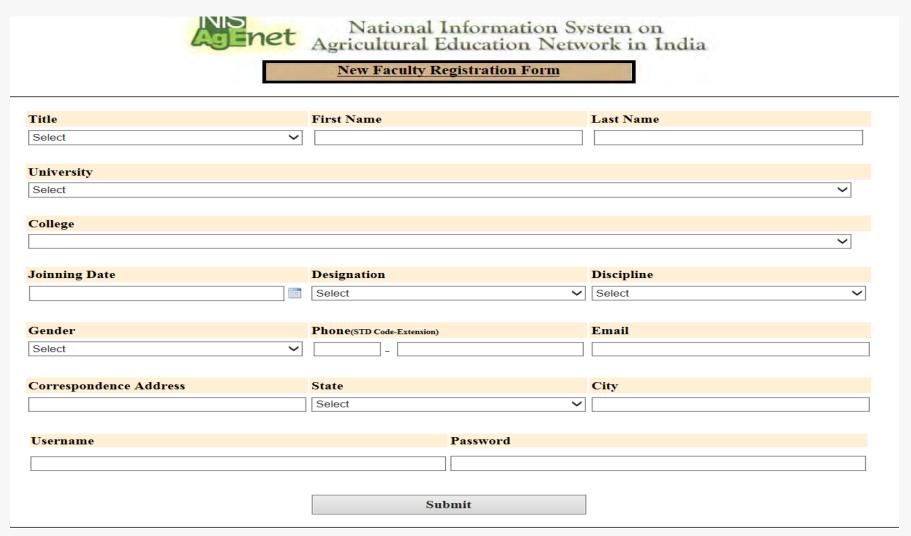


Faculty Profiles (2-4)





Faculty Profiles (3-4)





Faculty Profiles (4-4)



National Information System on Agricultural Education Network in India



Add/Edit Nodal Officer Detail

Assam Agricultural University, Jorhat (01)

17. Faculty Validation (Schedule - V)

Unvalid New Faculty

SNo	Name	University/College	Discipline	Designation	Phone	Email	Click to Approved
1	Dr. cece ee		Agricultural Chemistry and Biochemistry	Assistant Prof./ Lecturer (Sr. Scale)/	011-2222222	m1@gmail.com	Approve Disapprove
2	Ms. ddd ddd	College of Agriculture, Borbheta, Jorhat 785013	Agricultural Chemistry & Soil Science	Breeder	011-555555	ccc@gmail.com	Approve Disapprove



Management System for Post Graduate Education

- "Management System for Post Graduate Education" is developed under the IASRI institute funded project by Division of Computer Applications, IASRI.
- Management System: PG School, IARI is its first implementation.
- The system is available to authorized users through their distinct user Id and password.
- The system helps in achieving the PG School objectives by giving online access to various resources.
 - Courses Management
 - Student Management
 - Faculty Management
 - Administration Management
 - e-Learning



Thanks







GENERATION of S&T INDICATORS

- Issues & Challenges

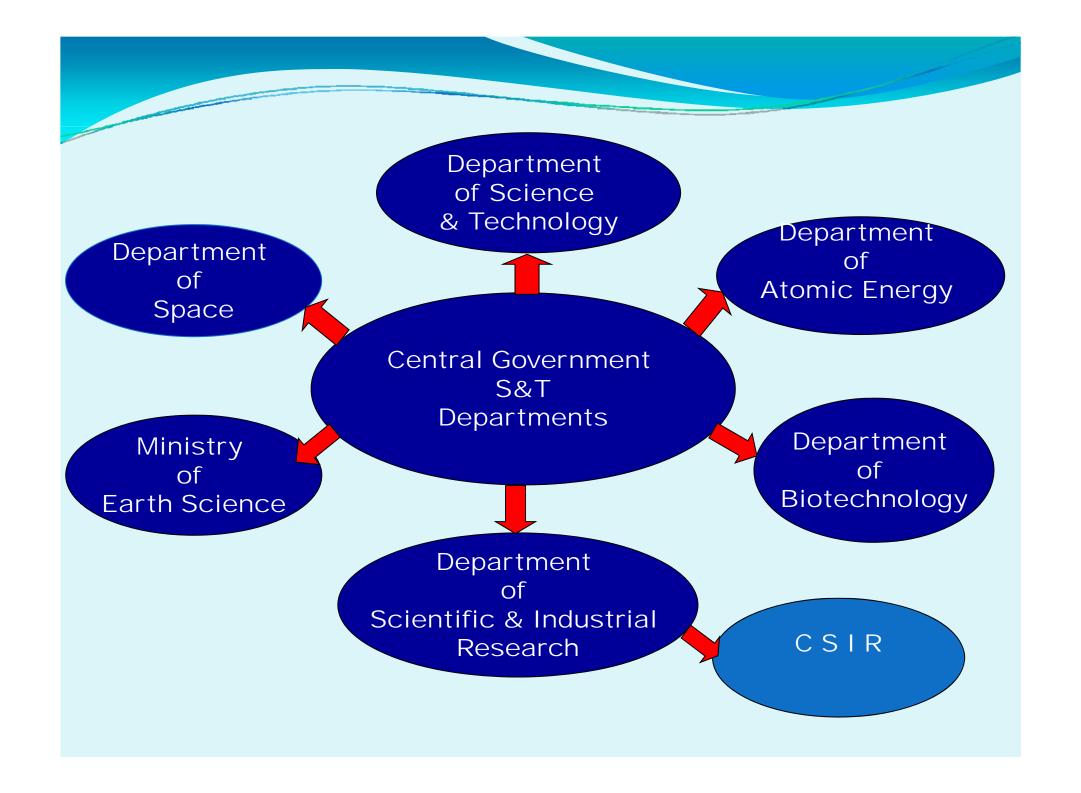


Dr. A. N. Rai

Department of Science & Technology Ministry of Science & Technology Government of India New Delhi

SCIENCE & TECHNOLOGY SYSTEM IN INDIA





Department of Science & Technology

Founded in 1971, when the country was facing different challenges. India today is an emerging and powerful economy. The aspirations of the youth are high and larger. DST needs to reference itself to the needs of the future of India, learning from the past and connecting to the present.

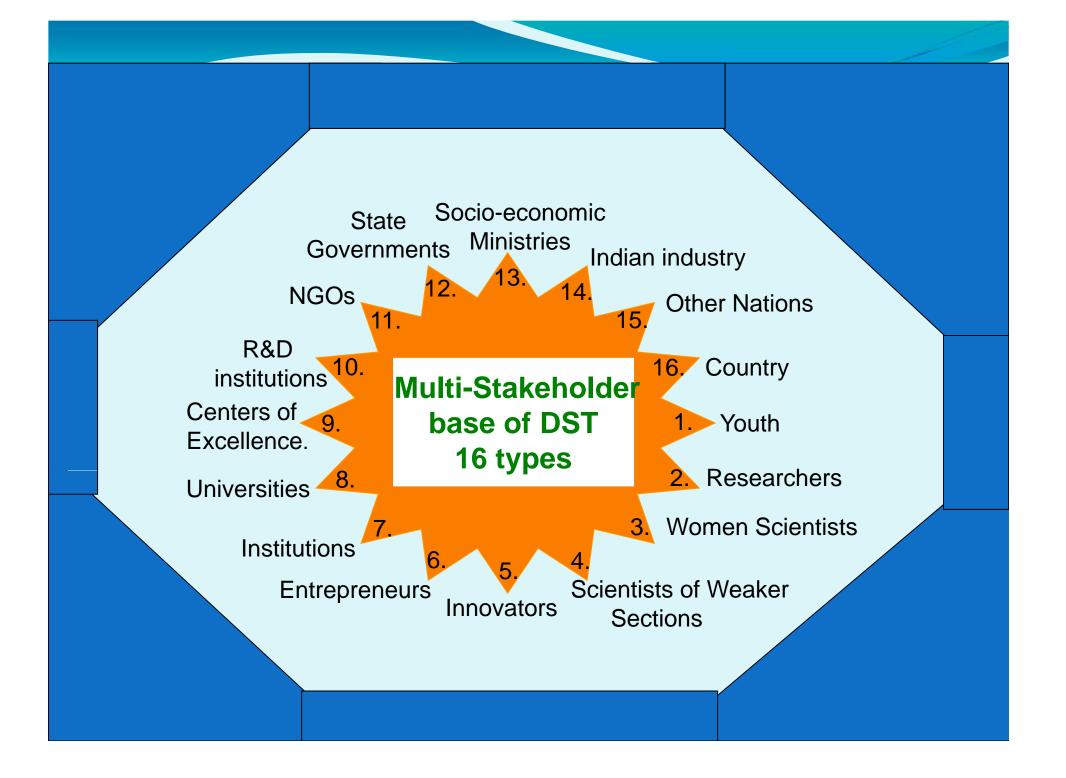
Referencing to the Context of the Time

Ongoing Efforts of Ministry of Science and Technology

to engineer the structure of R&D system to match the Developmental substance of India

DST: Objectives and Functions

- ➤ Formulation of Science, Technology & Innovation Policy other enabling Policies for the R&D Sector
- Strengthening Basic Research and Expanding R&D baseHuman Capacity
- Strengthening Basic Research and Expanding R&D base
 Institutional Capacity
- Implementing Technology Development Programs
- Societal Interventions of S&T
- > S&T Co-operation/ Partnerships and Alliance



NATIONAL SCIENCE & TECHNOLOGY MANAGEMENT INFORMATION SYSTEM (NSTMIS)

Mandate:

Catering the need of the country- Evidence based policy

Quantification of R&D resources in the country

- > S&T Manpower
- > S&T in Industry
- > S&T Infrastructure
- > S&T Input/output

NSTMIS ACTIVITIES

In-house R&D Activities

Sponsored Research Activities

Conducting National Surveys since 1973-74, biennially on S&T Resources

PAC mechanism

Brings out Publications based on national survey

In-house R&D activities

Conducting biennial National Surveys since 1973-74, on S&T Resources

Input parameters

Funds Personnel Infrastructure Output parameters

Patents
Publications
Products/Processes

OUTCOME

National Survey Publications

- Research & Development Statistics
- Research & Development in Industry
- S&T Pocket Data Book
- Directory of R&D Institutions

National Survey on Resources Devoted to <u>S&T Activities</u>

Survey Methodology

- * Planning of survey
- * Defining objectives
- * Identifying population / target groups
- * Designing of questionnaires
- * Execution and monitoring
- * Clarifying the queries received from respondents
- * Seeking clarifications from respondents
- * Sending reminders
- * Coding
- * Checking consistency of data

Methodology (contd..)

- * Co-ordinate data entry
- * Data validation
- * Check the correctness of tables generated
- * Interpretation of data
- * Review of literature for non-response
- * Collection of data from secondary resources/preparation of tables
- * Estimation of data
- * Projection of data
- * Preparation of graphs/charts
- * Reporting of data
- * Finalisation of reports and publishing

National S&T Survey - Questionnaire Design

Two types of Questionnaire

Questionnaire – I

Institutional Sector

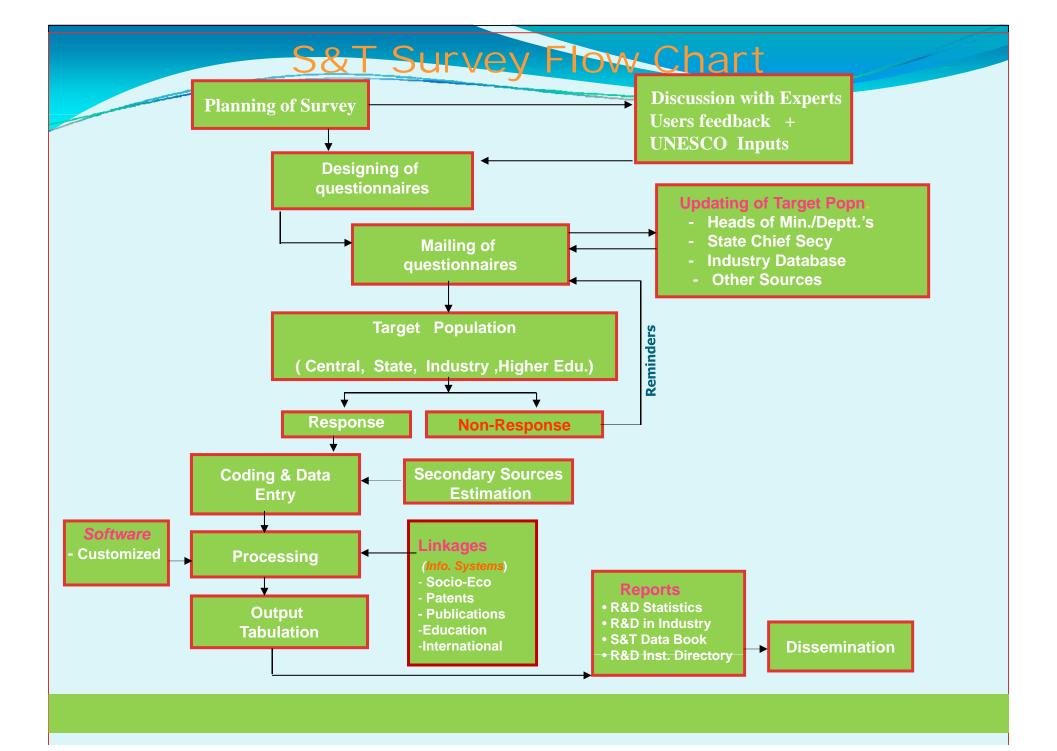
• Questionnaire - II

Industrial Sector

•Questionnaire - III

Higher Education

Success/ Response rate ~ 70-80%



National S&T Survey covers the following Sectors:

- Central (federal) Government
- State (provincial) Governments
- Higher Education *
- Small Scale Industry *
- Public Sector Industry
- Private Sector Industry and
- Non-profit Institutions /Scientific and Industrial Research Organisations (SIRO)
 - * Recent Initiative

PRESENT COVERAGE:

Total R&D Institutions (Labs/Industries, Universities) = 4568

A. HIGHER EDUCATION SECTOR

548 Universities

B. CENTRAL GOVERNMENT

Research Institutions / Laboratories

C. STATE GOVERNMENT

914 Agriculture Univ. / Research Stations / Depts.

D. INDUSTRIES

183 Public sector 2284 Private Sector

BENEFICIARIES OF NSTMIS OUTPUT

NATIONAL AGENCIES

- Central Government/Departments
 Major Scientific Agencies CSIR, DRDO, DOE, ICAR,
 ICMR, Planning Commission, Ministry of Industry, CSO, IAMR,
- b. State Governments
- c. Private/Public Sector Units
- d. Academic Institutions IIT, IIM, IISc., UNIV., etc.
- NGOs NIAS, NCAER, Swaminathan Research Foundation etc.

INTERNATIONAL AGENCIES

- UNESCO
- NSF
- Various Embassies/High Commissions

ISSUES & CHALLENGES

Issues

SI. No	Main Problems/ Difficulties	Solutions/ Approach Followed	
1	Time-lag is the major problem i.e. to receive the completed survey questionnaire within time	Quick Survey approach (Abridged Ques.) Use of web-based Questionnaire + Mail Card Survey to be attempted	
2	Inconsistency and Incompleteness of Survey Response	Filled in Ques. are checked for errors such as Summation, mismatch between expenditure and sources of funds, categorization of institutions in terms of S&T fields /regions /R&D objectives including partial response, necessary queries are referred back to the respondents.	
3	Difficulty in classifying the manpower employed for R&D activities and auxiliary (support) activities by responding units	Fresh reminders are sent / previous year questionnaires are used.	

St. No	Main Problems/ Difficulties	Solutions/ Approach Followed				
4	Conversion of Part-time R&D personnel into Full-time equivalent (as the amount of time worked by part timers in not reported) Response of the Part-time R&D	Part-time R&D personnel information is no longer sought from the respondents.				
	personnel parameter is very poor and also insignificant to the total R&D manpower.					
5	In Higher Edn. Sector- difficulty for academic staff to apportion expenditure between Research, teaching and administration.	Presently the survey is attempted in a sponsored mode. (the desired information collected through personal visits)				
6	Data Validation	Overcome by running appropriate Software programme followed by necessary revisions.				
7	Problem of Non-response	Estimation using secondary sources such as Budget Documents, Demand for Grants. Annual Reports as well as				

Challenges

- There are no national laws/mandates/statutory provisions relating to procurement of S&T Statistics from R&D establishments.
- ► The data on classification by age of S&T manpower and R&D expenditure by sector of economy are not collected so far in India.
- Many industries have no separate R&D departments and their R&D problems are tackled by production personnel. It is difficult to get information on R&D resources from such industries.
- Efforts are being made to enhance the coverage of non-recognized private R&D establishments through sponsored mode/using appropriate databases.

Information and Analysis

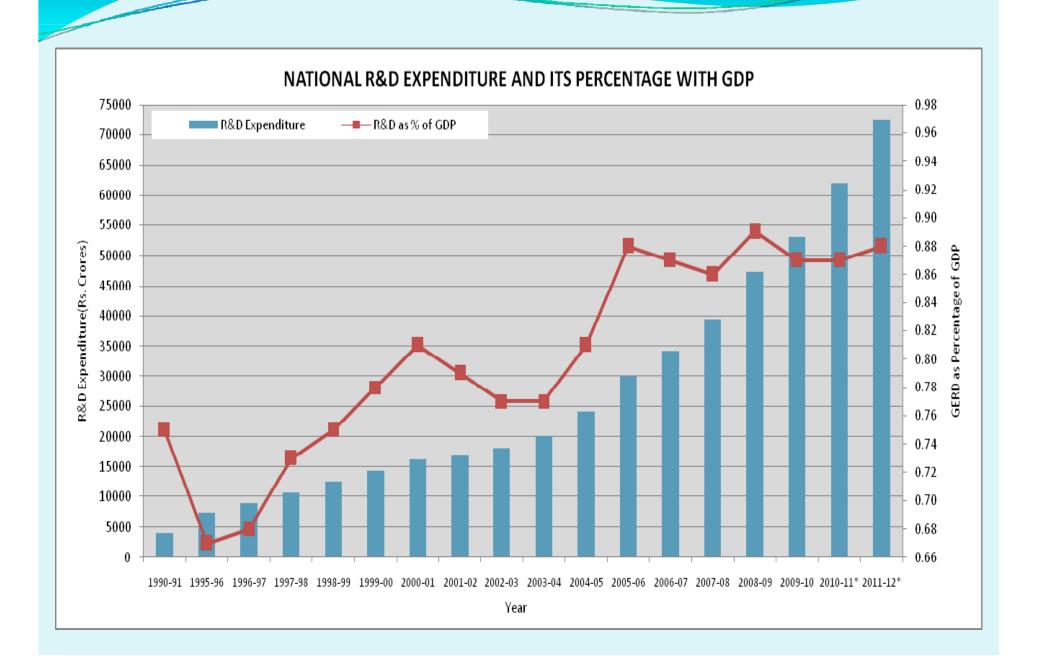
Primary Source (National Survey)

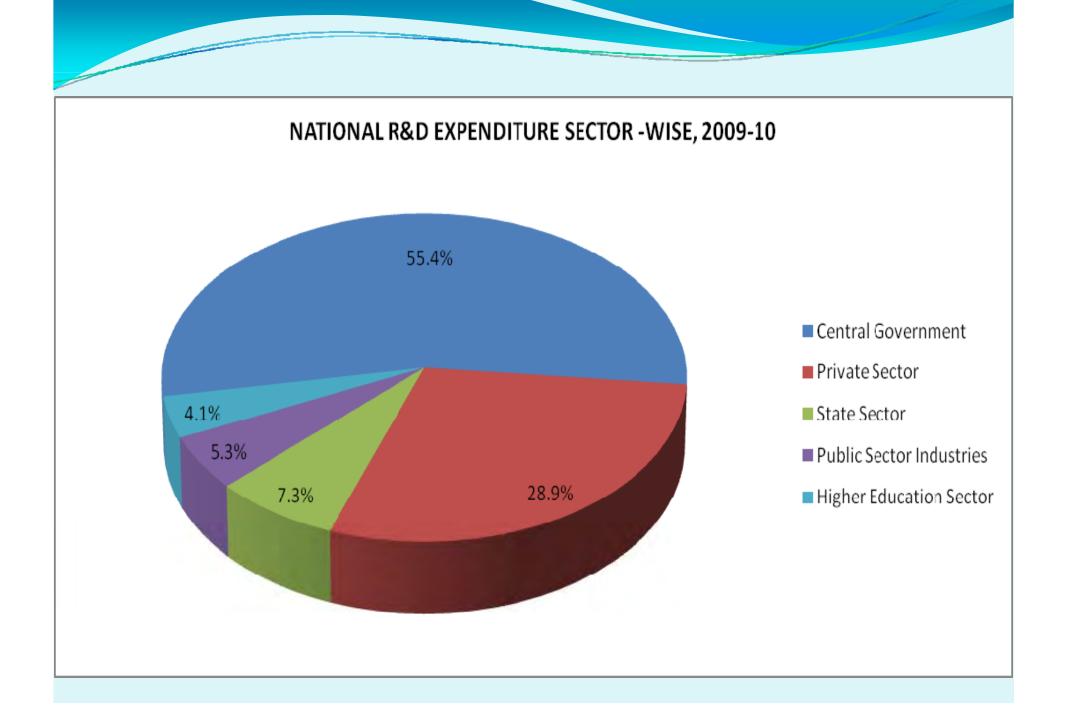
- **❖** National R&D expenditure and breakdown of this into various sectors
- **❖** National R&D expenditure as percentage of Gross National Product
- **❖** National R&D expenditure at current and constant prices
- **❖** R&D expenditure by Major Scientific Departments/Agencies
- **❖** R&D expenditure by socio-economic Ministries
- * R&D expenditure by various State Governments
- Sector- wise R&D expenditure by objectives defined by UNESCO
- ❖ S&T expenditure by categories of research basic, applied, experimental development and Other research related activities
- Sector-wise R&D Manpower

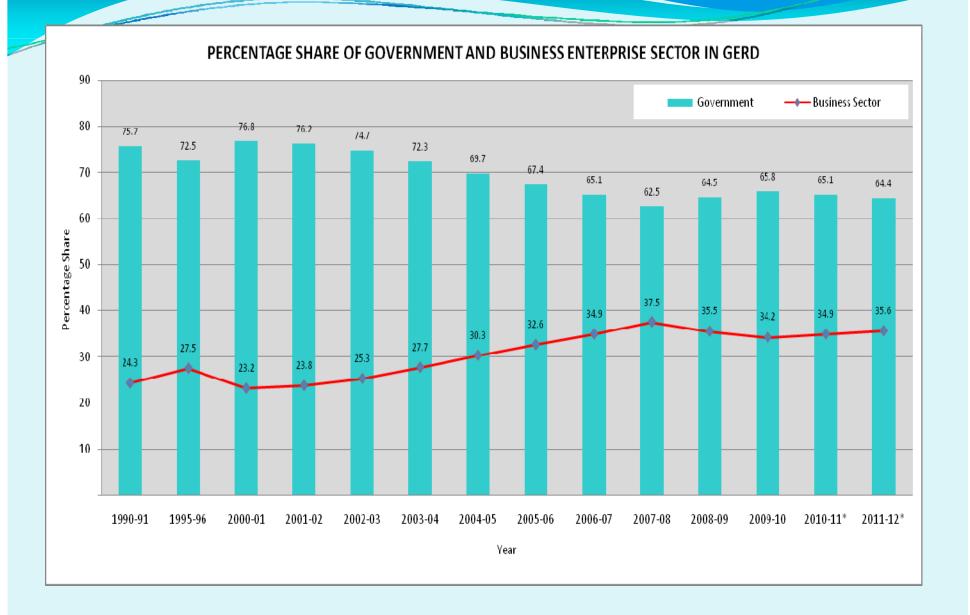
Information and Analysis Secondary Source

- ❖ Planning Commission, CSO, MHRD, AICTE, UGC, IAMR, Controller General of Patents, Association of Indian Universities, etc
- **❖** UNESCO, World Bank, National Science Foundation, OECD etc.

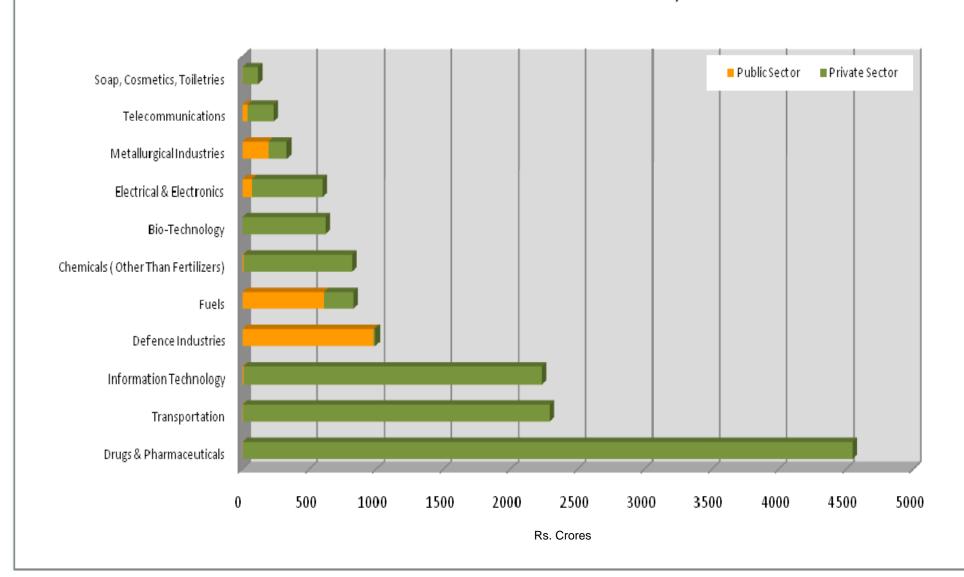
Major Indicators



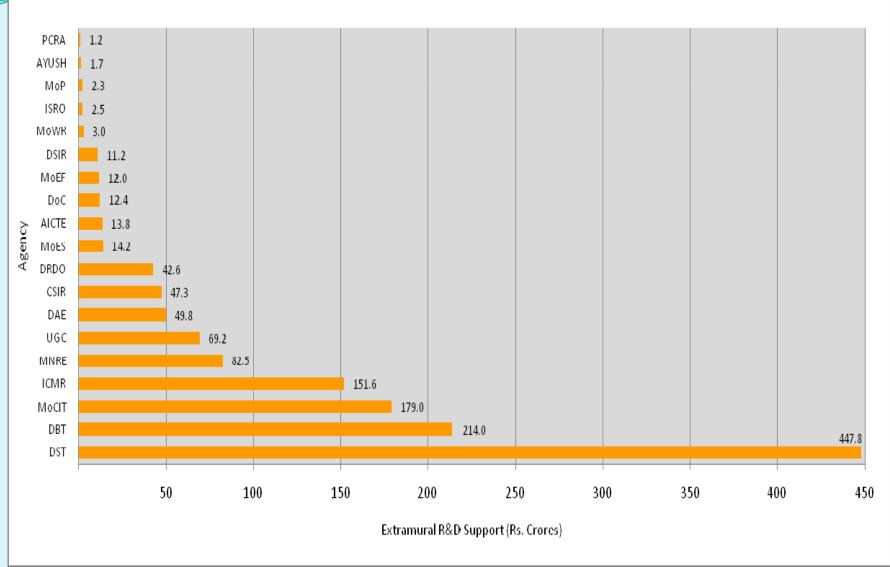




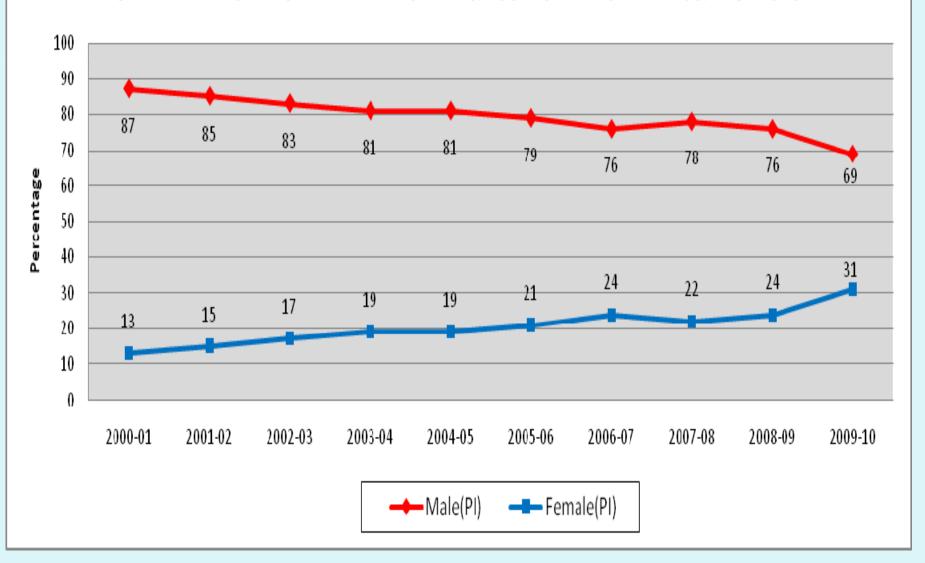








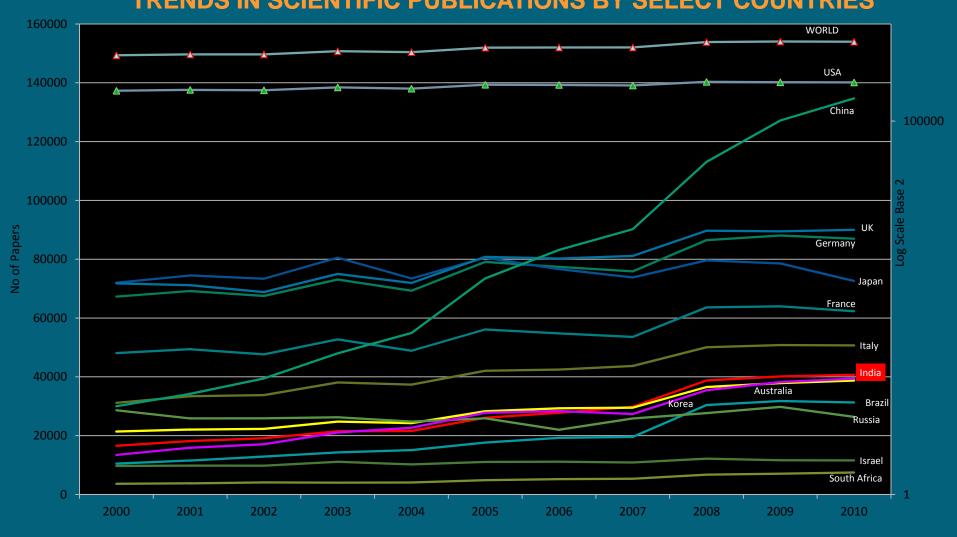




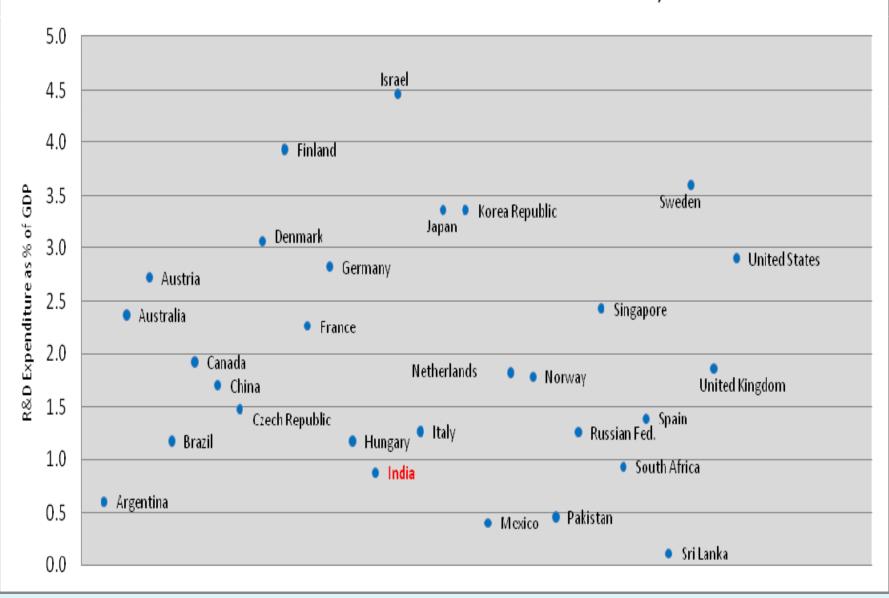
INDIA'S RESEARCH PUBLICATION TREND, 2000-2012



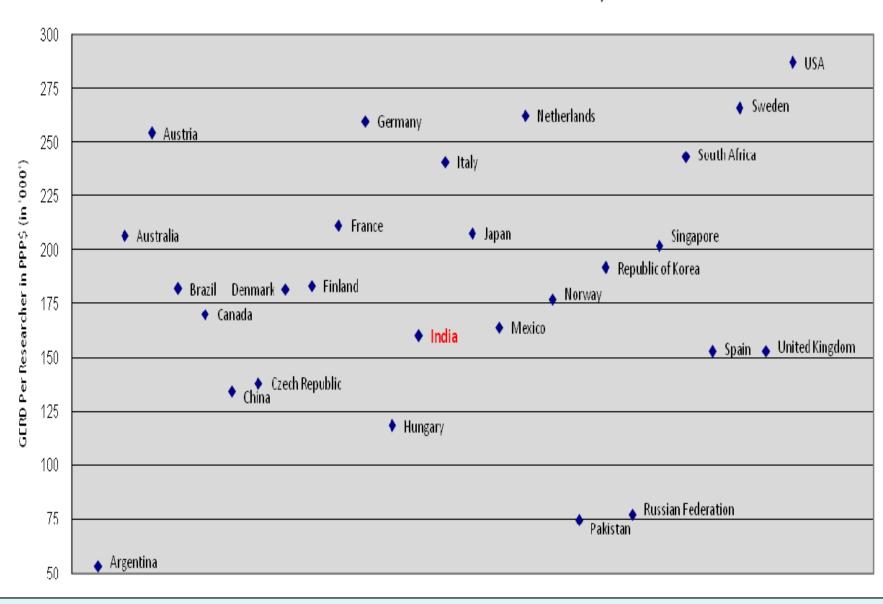
TRENDS IN SCIENTIFIC PUBLICATIONS BY SELECT COUNTRIES



R&D EXPENDITURE AS % OF GDP FOR SELECTED COUNTRIES, 2009



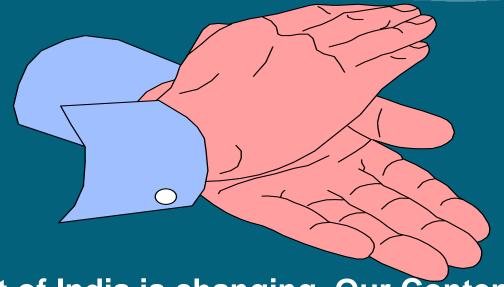
GERD PER RESEARCHER FOR SELECTED COUNTRIES, 2009



NSTMIS Division has its own website

nstmis web site

www.nstmis-dst.org



Context of India is changing. Our Content must match.

Thank you



HOUSEHOLD SURVEY ON EDUCATION BEING CONDUCTED BY NATIONAL SAMPLE SURVEY OFFICE (NSSO) (SDRD,NSSO)

Introduction

- India is a diversified country where multitudes of socioeconomic cultures, languages and religions co- exist.
- Importance of household survey through appropriate stratification hardly needs any mention.
- Households are the prime stakeholders by virtue of consumers of education services.
- Generation of information on education and the expenditure by individuals through a specialised household survey, therefore, has special significance.
- Need for uniform standard in concepts and definitions for comparability over time and at national, sub-national and international levels.

Surveys of NSSO on Education

- The National Sample Survey Office (NSSO) conducts comprehensive all-India household survey on 'Education', generally, once in ten years.
- This apart, person-wise information on literacy and educational attainment is collected for each surveyed household in all the household surveys of NSSO.
- In the quinquennial surveys of employment and unemployment, particulars of attendance in educational institutions are also recorded.
- Educational institutes are also covered in NSS surveys on service sector enterprises, the last such survey was conducted in NSS 67th Round (2010-11) on unincorporated non-agricultural enterprises.



NSS past surveys on Education

- The NSSO conducted first all-India survey on social consumption in its **35**th round (July, 1980 June, 1981)
- Subsequently, the subject of social consumption was covered by the NSSO in its **42**nd round (July, 1986 June, 1987), **52**nd round (July, 1995 June, 1996) and **64**th Round (July, 2007-June, 2008).
- Latest survey conducted by NSSO was in its NSS **71**st Round (January-June, 2014) on "Social Consumption: Education".

SDRD.NSSO

3/7/2014

Aspects covered in the survey

- The surveys generally covered both qualitative and quantitative aspects of educational services received by households.
- **Qualitative** aspects include distance of school from household, literacy, educational level attained, current attendance/enrolment, drop-out, reason for drop-out, etc.
- **Quantitative** aspects of educational services include expenditure incurred by households in availing themselves of these services with its break-up into tuition fees, transport costs, etc.

New features of NSS 71st Round (January-June, 2014)

- Information on IT literacy for the persons of age 14 years and above.
- Reason for preferring private institution.
- Language mainly spoken at home
- Whether taking private coaching and the reasons for that.

Outline of Sampling Design

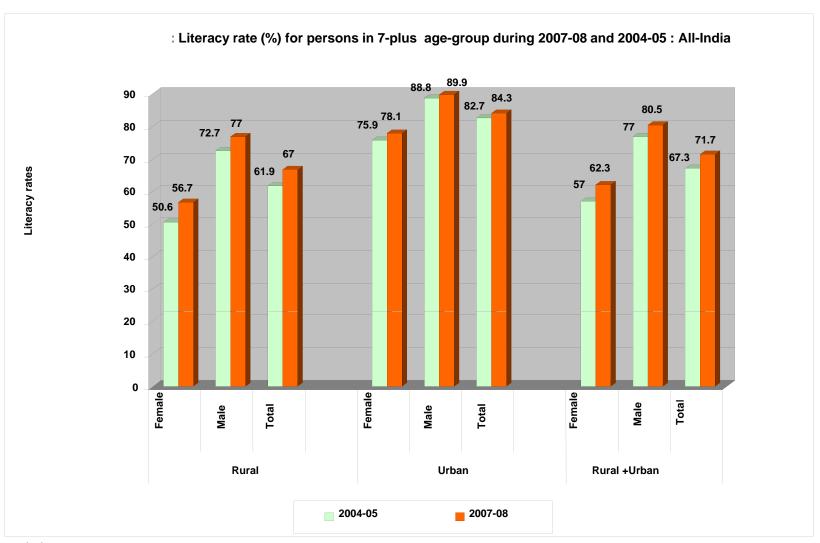
- Stratified multi-stage sampling design.
- First stage units (FSU) (census villages for rural sector and Urban Frame Survey (UFS) blocks for urban sector) are selected through PPSWR.
- # 4580 rural FSUs out of approximately 6.5 lakh villages and 3720 urban FSUs out of 6 lakh urban blocks for central sample were allocated at all-India level in NSS 71st Round.
- Ultimate stage units (USU) are households in both the sectors-drawn by SRSWOR.

3/7/2014



Key Results of NSS 64th Round survey on Education

Literacy of population

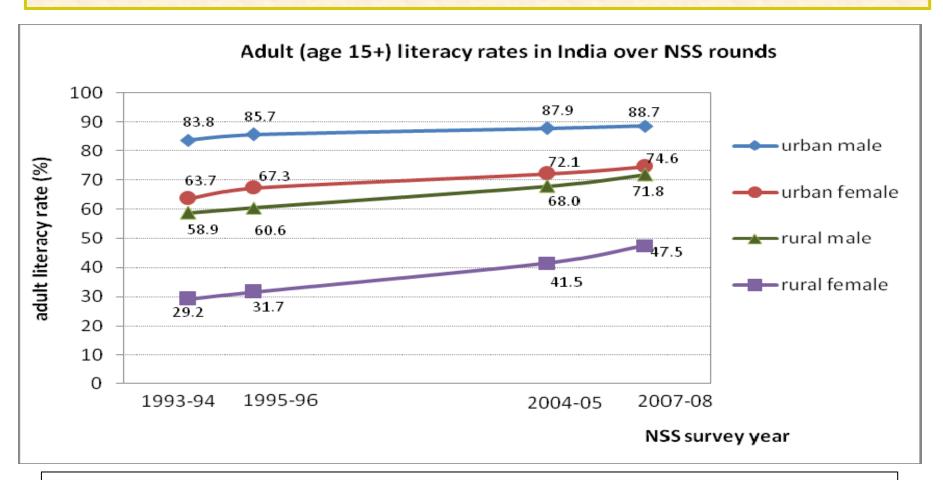


3/7/2014

Literacy rate: Census 2011 and NSS 64th Round (2007-08)

	Census 2011	NSS 64 th round (2007-08)
Population (age-7+)- male	541	444
Population(age-7+)- female	511	420
population(age-7+)- total	1051	865
Literacy rate(age-7+) - male	82.14	80.5
Literacy rate(age-7+) - female	65.46	62.3
Literacy rate(age-7+) - total	74.04	71.7

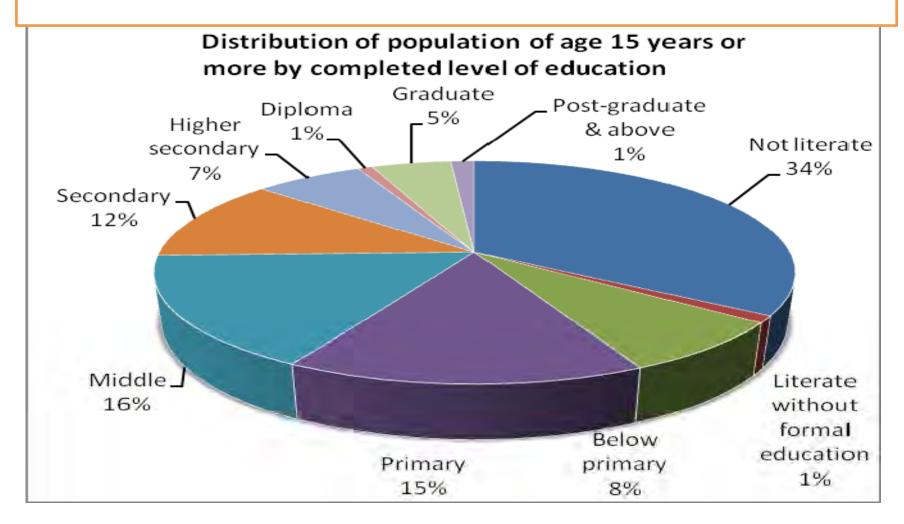
Adult literacy



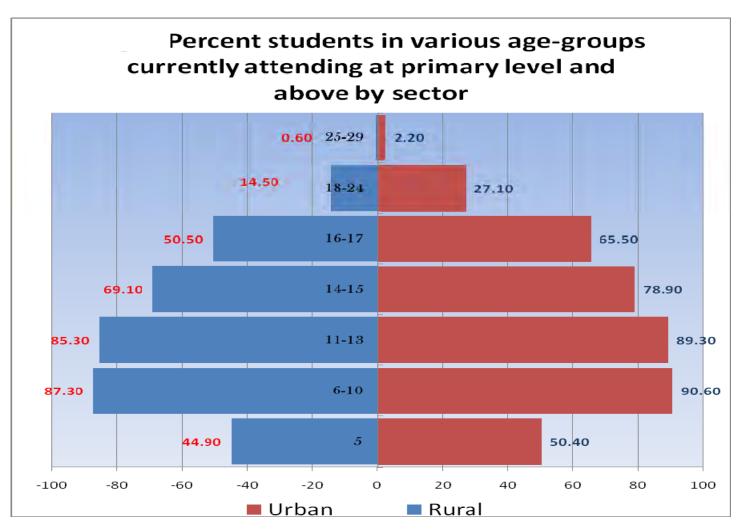
1993-94 (EUS, 50th rd.), 1995-96 (Social Consumption Survey, 52nd rd.), 2004-05 (EUS, 61st rd.) & 2007-08 (Education Survey, 64th rd)

3/7/2014

Completed level of education of adult population



Attendance



3/7/2014

Attendance Ratios

		All	Rural	Urban
<u>GAR</u> (%)	Classes I-V	104	105	103
	Classes VI-VIII	84	82	90
	Classes IX-X	70	66	85
	Classes XI-XII	48	41	65
<u>NAR</u> (%)	Classes I-V	84	84	85
	Classes VI-VIII	59	57	65
	Classes IX-X	41	38	51
	Classes XI-XII	27	23	40
<u>ASAR</u> (%)	Age 6-10	88	87	91
	Age 11-13	86	85	89
	Age 14-17	64	61	72
	Age 18-24	18	15	27

Free education

Percentage of currently attending students getting free education at different levels of school education

Level of education		Rural		Urban			Rural + Urban		
	Female	Male	Total	Female	Male	Total	Female	Male	Total
Primary	82.4	77.2	79.6	43.6	36.4	39.7	74.3	68.6	71.2
Middle	78.5	72.5	75.2	47.7	43.2	45.3	70.6	65.4	67.8
Sec. & HS	58.2	51.0	53.9	40.1	31.0	35.1	52.0	45.0	47.9

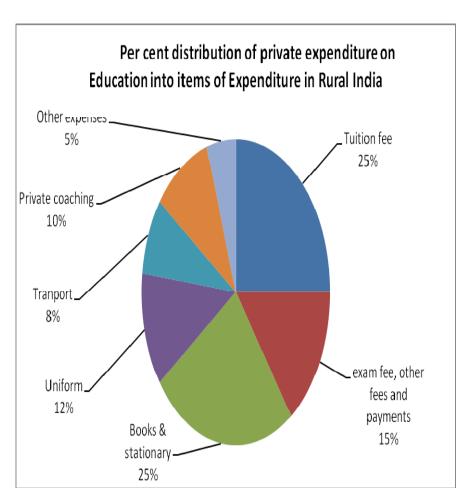


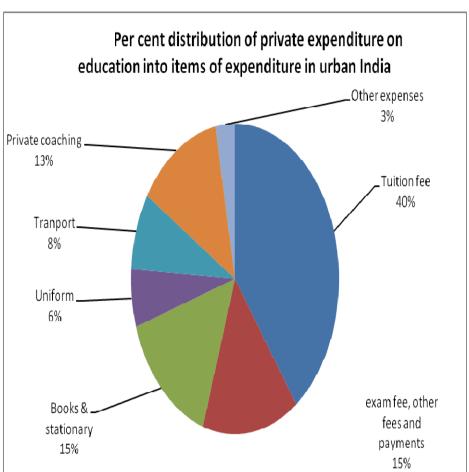
Average expenditure on education

Average expenditure (Rs.) per student per course by type of education

Type of education	Rural		Urban			Rural + Urban			
	Female	Male	Total	Female	Male	Total	Female	Male	Total
Above HS (General)	5924	6582	6327	8532	8404	8466	7324	7386	7360
General education-all	1382	1684	1551	4863	5351	5128	2293	2595	2461
Technical Education	23760	28453	27177	33714	35630	34822	31111	32695	32112
Vocational Education	16227	12624	13699	19737	15263	17016	17705	13480	14881

Components of private expenditure on education

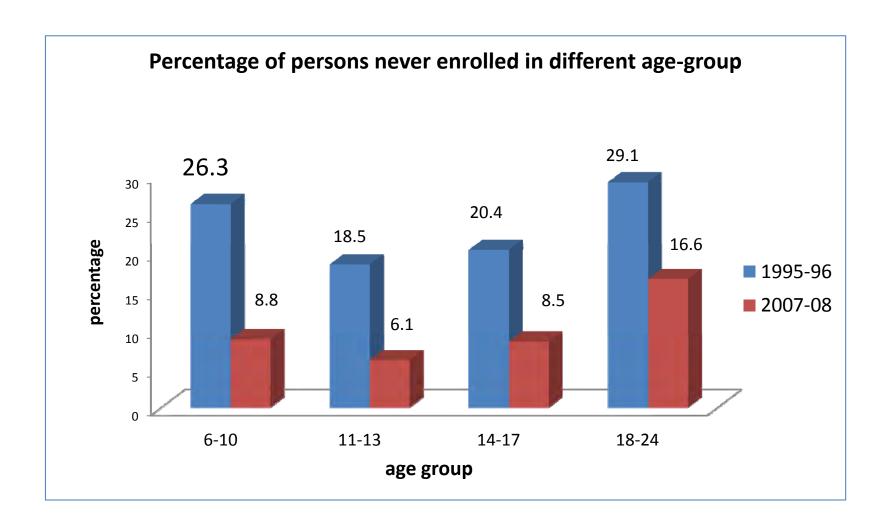




Percentage of ever-enrolled persons aged 5-29 years by current attendance for each completed level of education

level of education (completed)	currently attending any	currently not attending completed not		estd. (00) no. of ever enrolled
(compressely	course	last enrolled	completed	persons aged 5-29
		level	last enrolled	years
			level	
not completed any				
level	19.0	0.0	81.0	18056
informal education	82.4	1.1	16.5	6456
pre-primary	86.0	0.2	13.9	1420478
primary	54.7	18.9	26.4	1080587
middle	43.4	25.4	31.2	693578
secondary	40.7	43.3	16.0	438873
higher secondary	49.7	43.8	6.5	259285
diploma	20.5	77.1	2.3	25820
graduation	20.6	77.5	2.0	116308
post grad. & above	9.9	89.6	0.5	30944
all	60.2	20.1	19.7	4090393
estd ₃ no ₂₀ (00)	2461642	SDRD,NS 823845	804906	XXX

Never-enrolment





Gross Attendance ratio (GAR)

= $\frac{Number\ of\ persons\ attending\ class\ I-V}{Estimated\ population\ in\ the\ age-group\ 6-10}$ x 100

For the class-groups of school education, i.e. I-V, VI-VIII, IX-X and XI-XII, the corresponding official agegroups are taken as 6-10, 11-13, 14-15 and 16-17 respectively.)



Net Attendance Ratio (NAR)

$$= \frac{\textit{Number of persons of age 6} - 10 \textit{ years attending class I} - \textit{V}}{\textit{Estimated population in the age} - \textit{group 6} - 10} \times 100$$



Age-specific Attendance Ratio (ASAR)

= $\frac{Number\ of\ persons of\ age\ 6-10\ years\ attending\ educational\ institutions}{Estimated\ population\ in\ the\ age-group\ 6-10}$ x 100





International experience of collecting, compiling, publishing and utilising education data and lessons for India



Cultural Organization

Shailendra Sigdel

Statistical Advisor for South Asia UNESCO Institute for Statistics UNESCO New Delhi

s.sigdel@unesco.org www.uis.unesco.org

International education data, what for?

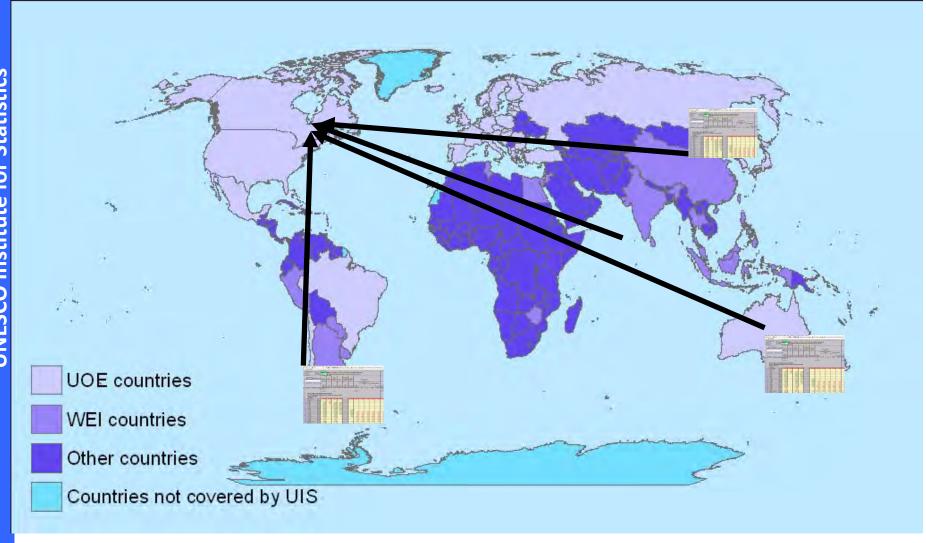
Internationally comparable data...

- Allows to compare education systems
 - Share knowledge about good practices
 - Offer external view on national systems



- Allows countries to monitor and benchmark their progress towards development goals at international level
 - Inform the international community of neglected areas
 - Compared the progress with other countries
- Developing, informing and amending appropriate policies, ensuring decisions are evidence-based

to international comparisons



Collects education data annually from 162 developing countries and additional 15 countries on WEI

Why international comparable indicators?

International indicators ensure comparability across countries and help to go beyond the national perspective

BUT:

 International indicators do NOT provide better information then national indicators when looking at ONE country isolated

■ That is why:

 Only issues for which the international perspective adds value should be taken into account



Data processing report



DATA PROCESSING REPORT

INDIA

WEI REGULAR DATA COLLECTION

Thank you for completing the WEI Regular Data Collection Survey 2012 for the academic and finance year ending in 2011 (ENR). ENTR, PERS and FINANCE). Please find below a report requesting clarifications on the data submitted.

We would appreciate to receive your response to this report by March 27th in order to ensure that your country's data can be disseminated in a timely manner and included in international reports.

Please send your response to Ms. Tin Nam Ho (tn.ho@unesco.org).

12 March 2013

RESPONDENTS: Mr. Vijay Bhasker Sharma Senior Statistical Officer

Ministry of Human Resource Development

bhasker1959@vahoo.co.in

Mr. Sanjay Digi Director - Statistics

Ministry of Human Resource Development sanjay.digi@nic.in/ sanjaydigi@yahoo.com

GENERAL

Missing codes "a, m, n, x" are used based on the revised ISCED mapping. Please

Comment/explanation:

During the bilateral meeting in Bangkok May 2012, it is mentioned that:

 For foreign / mobile students in ENRL8 and ENRL9, results from survey on. higher education would be available by July 2012. However, data are missing. Please provide data.

Comment/explanation:

ENTR at ISCED 5 and GRAD at ISCED 5 and 6 are collected and would be available the following year. However, data are missing. Please provide data.

Comment/explanation:

Data or estimates for CLASS and CURR are not available. Therefore, data have been changed to 'm' for missing.

Comment/explanation:

DATA ISSUES

ENROLMENT

ENRL1, ENRL1 Adult and ENRL3

At ISCED 1, enrolment is reported to be 143,704,722 in ENRL1 but adult education is 5,957,905 therefore enrolment excluding adult education is 137,746,817 (143.704.722 - 5.957.905). However, it is reported as 135.316.946 in ENRL3. What are the additional 2,429,871 students (137,746,817 - 135,316,946)?

143,704,722 (2) ENRL1 Adult: 5,957,905

(3) Enrolment excluding adult education 137,746,817 (1) - (2)

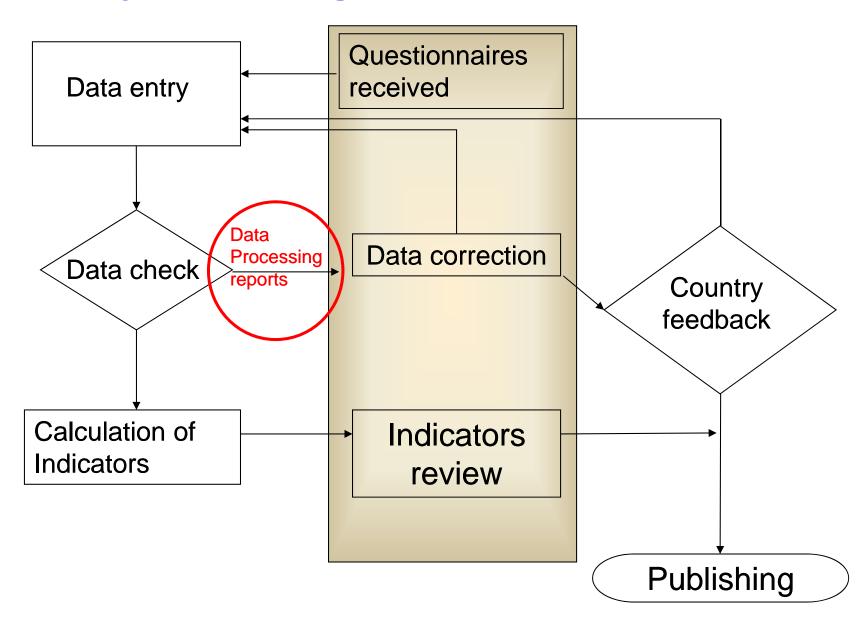
(4) ENRL3: 135,316,946 (5) Difference: 2,429,871 (3) - (4)

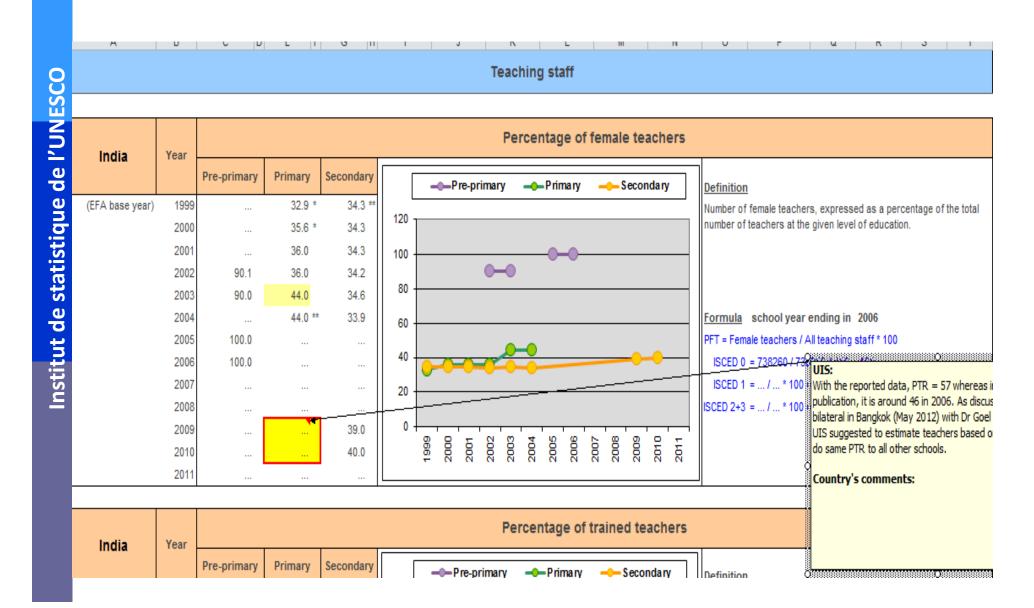
Comment/explanation:

At ISCED 5A, female enrolment increases 26.2% and at ISCED 5B total enrolment increases 162.5%. Please explain.

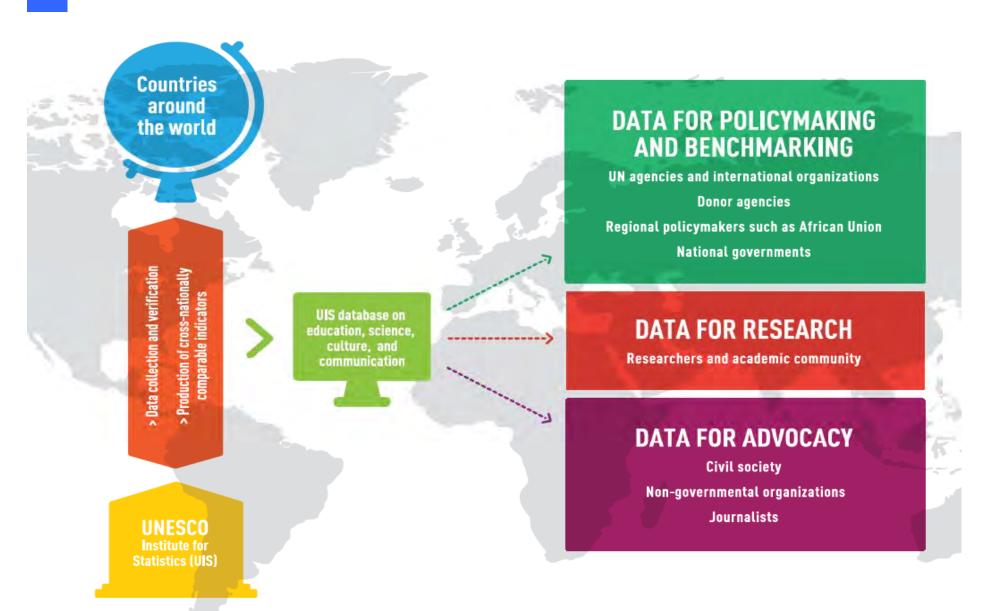
	Students enrolled in Tertiary Education (ISCED level 5 and 5)				
Year	Total SA45846	35	50		

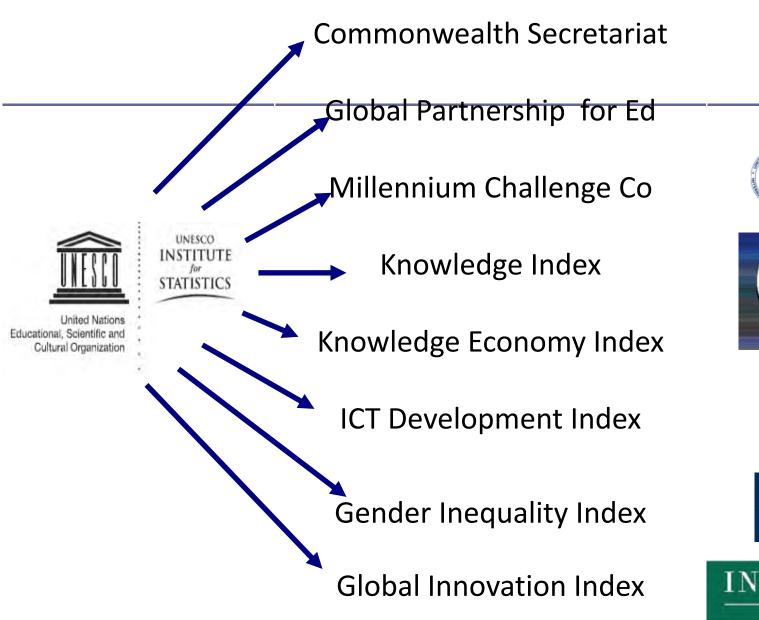
Data processing and validation at UIS





Importance of producing high quality international education data

















Outputs and data dissemination

- UIS data are featured in other institutions products
 - ✓ International reports
 - ✓ Regional reports and publications

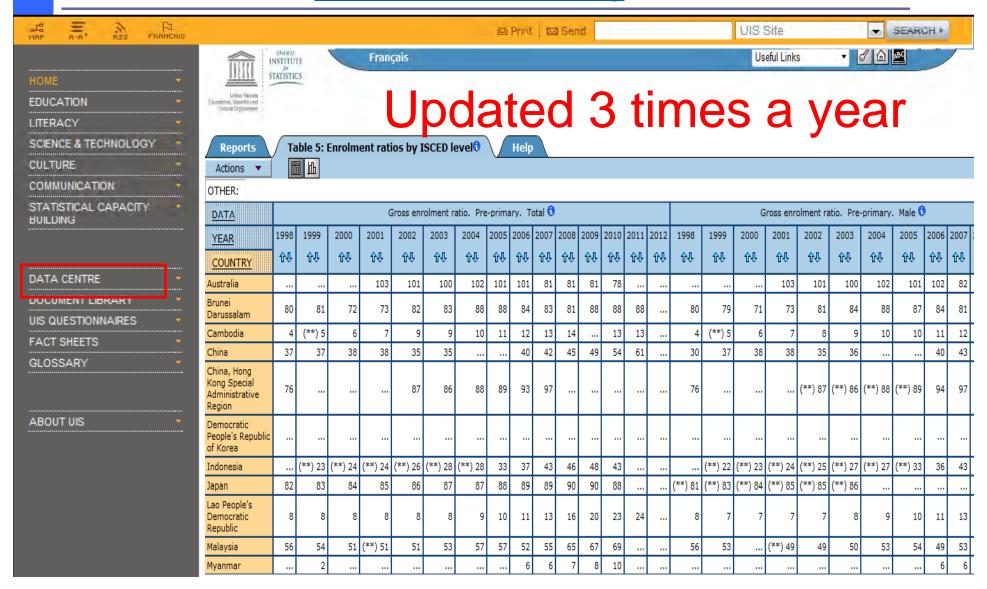






UIS Data Centre: http://stats.uis.unesco.org

www.uis.unesco.org



UIS E-Atlas series

 Allow users to export customized, professional quality, full color maps and graphs

o5 E-Atlas:

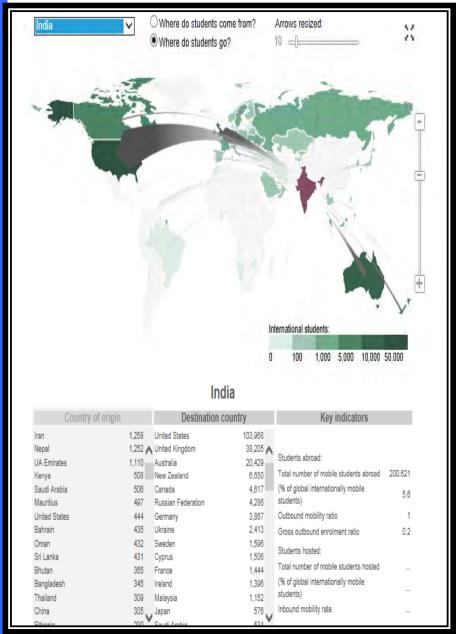
- ✓ Gender equality in Education
- ✓ Teachers
- ✓ Out-of-school children
- ✓ Research and Experimental Development
- ✓ Mobile student

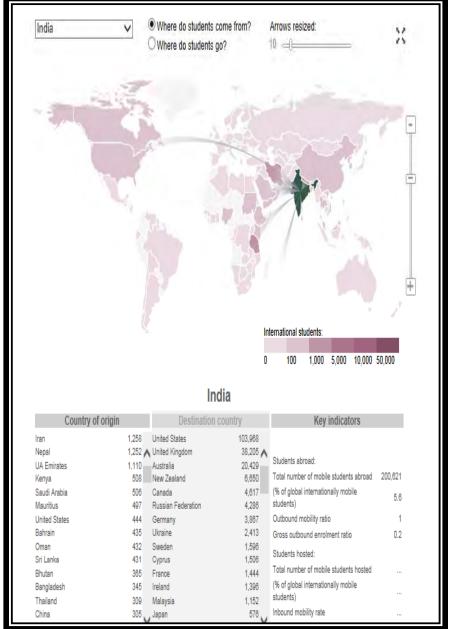
UIS E-Atlas series: gender equality in education

Two-thirds of countries show gender parity in primary education



UIS data visualisation: interactive map





Challenges of data collection

- Making it comparable using ISCED 2011
- Late/no response
- Missing some variables
- Unreliable increase / decrease
- Modification of tertiary / country
- Choosing right means of dissemination
- Increasing the quality of education by product of quality of national data

Lessons for India

- Enhancing coverage and quality of statistics
- Dissemination through proper means not only paper,
 -website, E-Atlas, data visualization, short video etc.
- Publishing occasional research paper on specific theme(s)
- Making available updated data
- Adopting proper methodologies to calculate indicators
- Work closely with policy makers and researchers to make use of collected data
- Response on time to reflect 'real' picture of India to international communities

Thank You!

Shailendra Sigdel s.sigdel@unesco.org

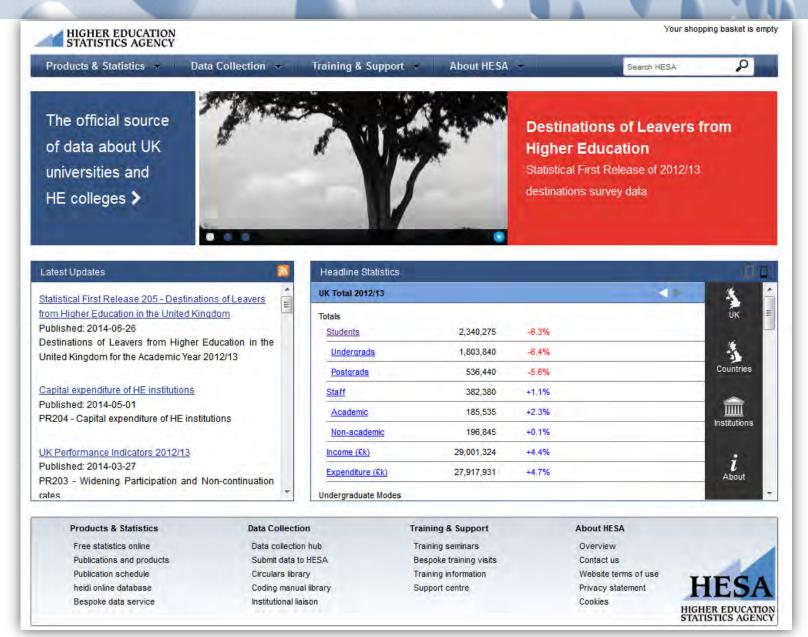


UK Higher Education Data and Statistics

The Higher Education Statistics Agency

Alison Allden
Chief Executive





HESA website: www.hesa.ac.uk



HESA's Mission

To support the advancement of UK higher education by collecting, analysing and disseminating accurate and comprehensive statistical information in response to the needs of all those with an interest in its characteristics and a stake in its future.





HESA – the Agency



- HESA is a Company Limited by Guarantee
- HESA is a sector-owned agency
- HESA exercises statutory powers of data collection from HEIs on behalf of its Statutory Customers

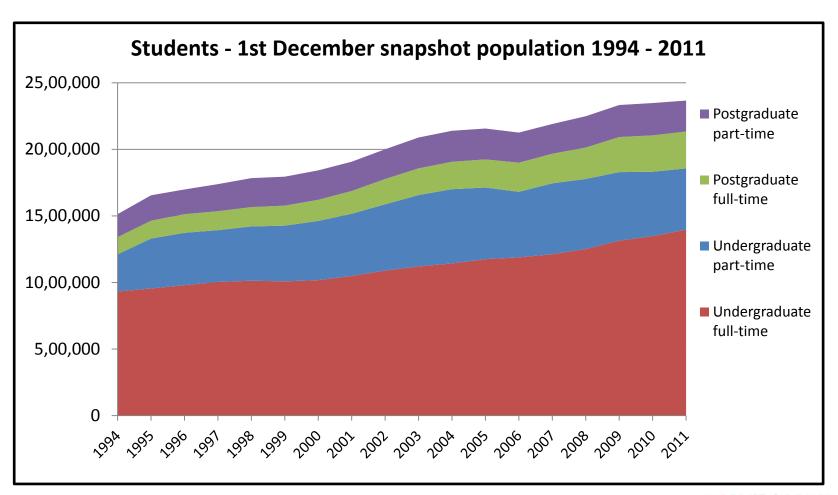
History of HESA

- Created in 1993
- Replaced a number of different statistical systems
- First collections for 1994/95



Trends in Higher Education

Student population has grown from 1.5m in 1994 to 2.3m in 2011





Accuracy and quality

- HESA data collected on UK-wide basis under authority of statutory bodies
- Stringent quality standards applied during collection
- Annual collections on retrospective basis
- HESA data widely used and scrutinised
- HESA is a designated Official Statistics producer and is subject to Code of Practice
- Certified to ISO 9001:2008 for quality systems





HESA Data Collections

Aggregate Offshore

Count of students studying wholly overseas for UK HE qualifications

Finance

Income and expenditure of HEIs

Initial Teacher Training

In-year record administrative data about those undertaking teacher training

Student

Information about students, courses and qualifications at HEIs

Institution Profile

Information about HEI campuses and departments

Staff

Information about staff employed by HEIs

HE Business and Community Interaction

Interactions

between HEIs and business and the wider community

Longitudinal DLHE

Sample survey of leavers 3.5 years after graduation

Destinations

Survey of graduate activities six months after leaving HE

Estates

Management

Buildings, estates and environmental information about HEIs

Key Information Set Data about undergraduate courses, published on Unistats

HIGHER EDUCATION STATISTICS AGENCY

HESA Data Collection

The content of the data that HESA collects is determined by government and HE funding bodies, in consultation with HE providers and other key data users. The data collection streams are:

- <u>Student record</u> information about students, courses and qualifications at HEIs
- <u>Staff record</u> information about staff employed by HEIs
- <u>Finance record</u> income and expenditure of HEIs
- <u>Destinations of Leavers from Higher Education</u> survey of graduate activities six months after leaving HE
- <u>DLHE Longitudinal Survey</u> sample survey of leavers 3.5 years after graduation
- Aggregate offshore record count of students studying wholly overseas for UK HE qualifications
- HE Business and Community Interaction survey information about interactions between
 HEIs and business and the wider community
- <u>Estates management record</u> buildings, estates and environmental information about HEIs
- <u>Initial Teacher Training (ITT) in-year record</u> administrative data about those undertaking teacher training
- <u>Institution profile record</u> Information about HEI campuses and departments
- <u>Key Information Set</u> Data about undergraduate courses, published on <u>Unistats</u>



Who does HESA collect data for? HE providers and agencies

Statutory customers

- Higher Education Funding Council for England (HEFCE)
- Department for Business Innovation & Skills (BIS)
- Higher Education Funding Council for Wales (HEFCW)
- Welsh Government (WG)
- The Scottish Government (SG)
- Scottish Funding Council (SFC)
- Department for Employment and Learning (DEL(NI))





Cyngor Cyllido Addysg Uwch Cymru Higher Education Funding Council for Wales











Other

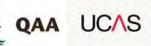
- The HE sector in the UK
 - 165 institutions
- Universities UK (UUK)
- GuildHE
- Quality Assurance Agency (QAA)
- Universities & Colleges Admission Service (UCAS)











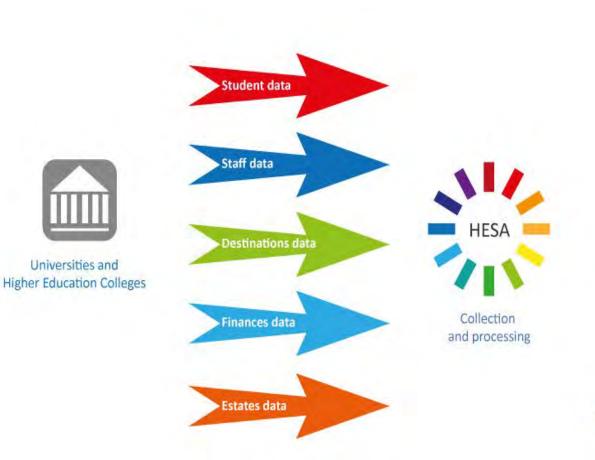


Subscribers – 2012/13 Education institutions

- 161 Higher Education Institutions (student record)
 - 130 England
 - 18 Scotland
 - 9 Wales (10 staff record)
 - 4 Northern Ireland
- Alternative providers (England)
 - With designation courses for student loans
- Alternative providers for-profit and charitable



The HESA data lifecycle







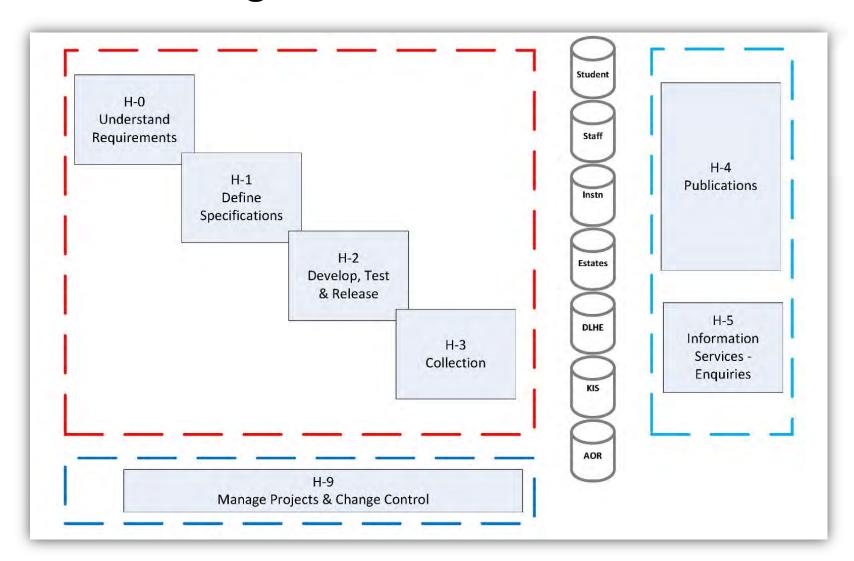
Collection regime

A Collection timetable

Activity	Start	End
Review of Data Collection	May 2012	Dec 2012
Data specification	January 2013	May 2013
Documentation published – pro-forma, guidance etc.		July 2013 (latest)
Training	September 2013 onwards	
Specification of quality checks	May 2014	July 2014
Preparation for data collection	August 2014	November 2014
Issue pro-forma with validation checks in it		
Data collection for academic year 2012/13	December 2014	February 2015
Preparation for publication	February 2015	
Publication	February 2015	April 2015



Collection regime

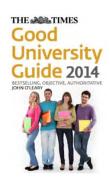


Onward use of data and information

University guides and league tables













HESA publications







National Statistics



International statistics







More facts and figures for 2012/13

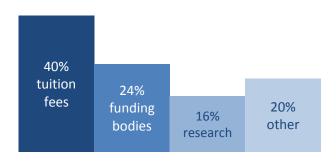
Destinations

20% of leavers go on to further study



Finances

£29 billion income 40% from tuition fees



Staff

185,585 academic staff 36% on fixed-term contracts



Business & Community

3,700 new spin-off companies each year

3,700



Other Higher Education Statistics

- ONS Labour Force Survey
- Statistical Publications by Government Departments
 - https://www.gov.uk/government/publications/higher-education-national-statisticsreleases
- Student Loan Company statistics
- Linked data
 - National Pupil Database (Department for Education) with Skills Funding Agency (Further Education) and HESA data (Higher Education)





UK Higher Education Data and Statistics

The Higher Education Statistics Agency

Alison Allden
Chief Executive





Public information for students in England

Dr Ellie Clewlow

Head of Learning and Teaching Policy

India Habitat Centre, New Delhi

July 2014

Role of HEFCE

- allocating public funds for teaching and research
- promoting high-quality education and research
- promoting links between HE and industry/commerce
- encouraging diversity and equal opportunities
- promoting HEIs' compliance with charity law duties
- advising Government on the needs of HE
- ensuring accountability and value for money.







Students at the heart of the system





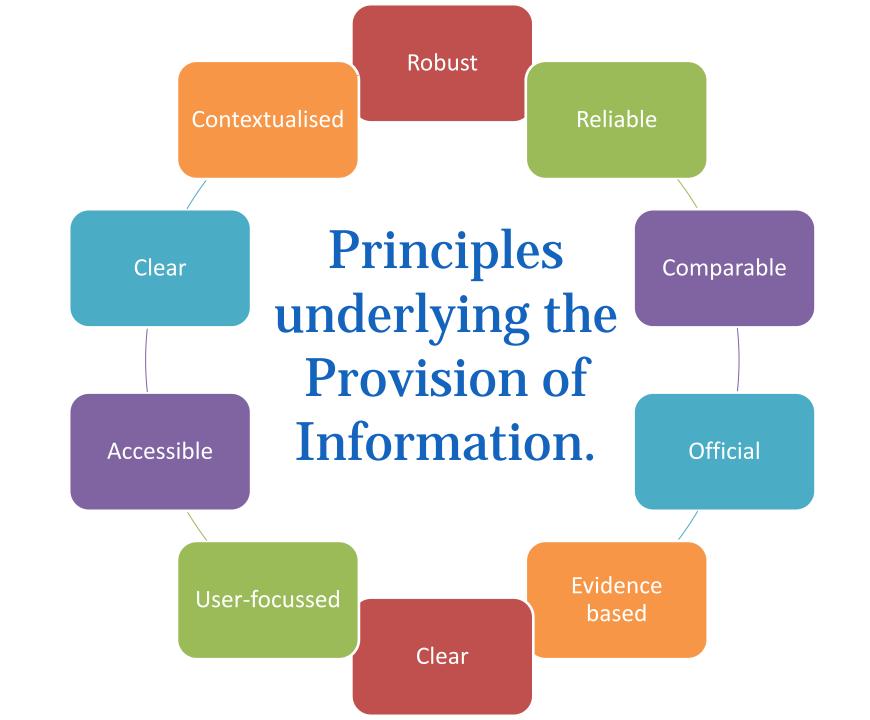
Provision of information to students

Purposes:

- Provides evidence for quality
 assurance purposes in institutions
- Can be used to enhance the quality of higher education provision
- Informs student choice about what and where to study



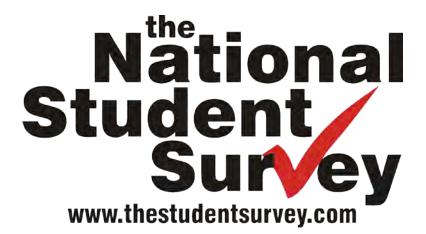




Information for quality assurance

QAA

 Institutions ask their students and themselves 'How do we know what we do is working?'





External accountability



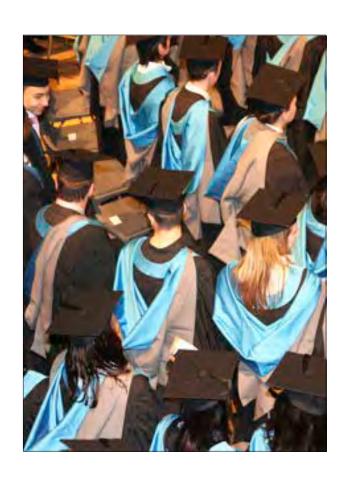
Information for quality enhancement

At institutional level

 E.g. Improvement initiatives in response to the National Student Survey

At national level

- E.g. Support for teaching excellence through the Higher Education Academy
- E.g. Support for technologyenhanced learning through the Changing the Learning Landscape initiative





Information for student choice





Development of the Key Information Set (KIS)

Information for student choice

6. Proportion of students at the university satisfied or very satisfied with their feedback on assessment

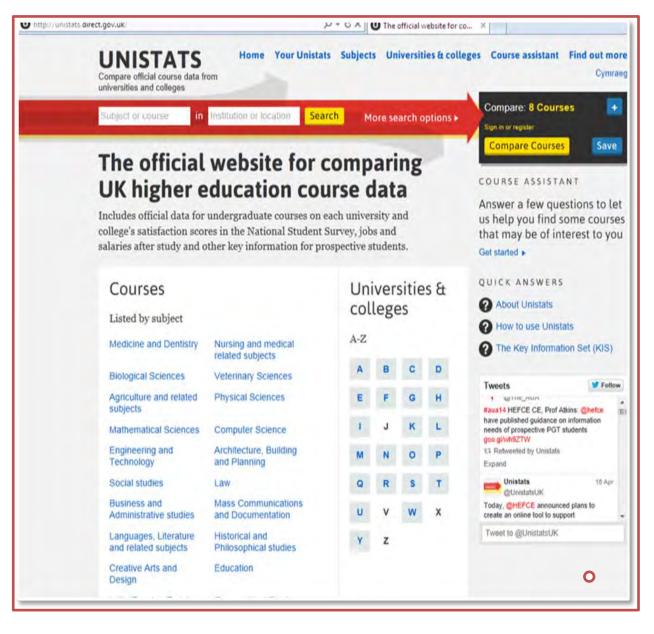


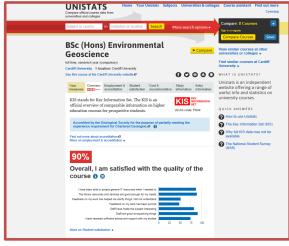
months after leaving der bestimation a onal or managerial job terms this coult be atisite on the best of the country of the co

- 8. เาอออกเลย อารเปลี่ยกเรื่อน the university
- 14. Figure 14. Figure 2. 14. Figure 14. Figu
- 15. Profile Carlo Carlo
- Sefer Cresting the dation
- 10. Percentage course per in scheduled
- 16. Fearning Truling
 - 11. Proporties under a survey comby written or practical exam or coursework

Unistats Includes:

- Proportion of students at the university satisfied or very satisfied with the standard of teaching
- 2. Proportion of students at the university satisfied or very satisfied with their course
 - Proportion of students in employment six months after completing this course
 - Professional bodies which recognise the course
 - Proportion of students at the university satisfied or very satisfied with the support and guidance they received

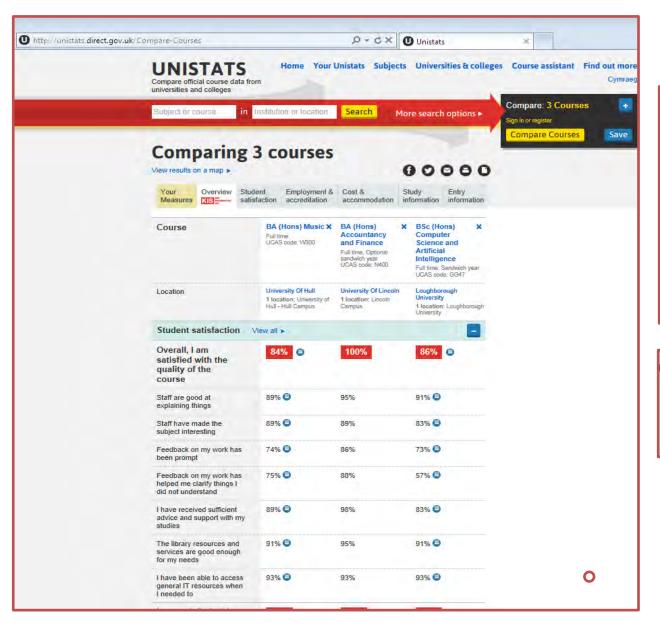








Unistats Website









Unistats Website





How to find out more

email: e.clewlow@hefce.ac.uk

Twitter http://twitter.com/hefce

web-site http://www.hefce.ac.uk/whatwedo/lt/publicinfo/















International Standard Classification of Education (ISCED) 2011

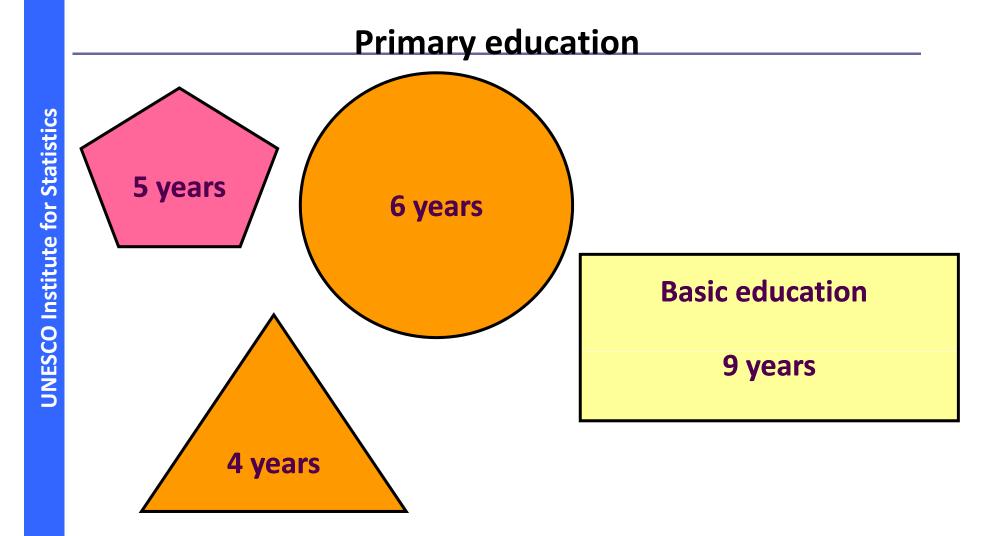
International Seminar on Higher Education Statistics and Public Information System

3 - 4 July 2014

New Delhi, India



United Nations Educational, Scientific and Cultural Organization UNESCO INSTITUTE for STATISTICS



	spu											
	Cook Islands				an an					5		Vanuatu
Age	Coo		Ē		Tokelau		Tuvalu					Van
5		Primary				Primary				Primary		
6		Y1-Y6		Primary				Primary		Y1-Y6		Basic education
7	1			Y1-Y6	1			Y1-Y6	1			Y1-Y6
8							1					1
9			1									
10										SPELL 2		
11	2	Secondary				Secondary Y7-Y10				Primary		
12		Y7-Y10	2	Primary	2			Primary	2	_		Basic education
13				Y7-Y8			2	Y7-Y8	3	,		2
14			3	Secondary				Junior sec.		Y9-Y12		3 Senior Secondary
15	3	Secondary		Y9-Y12	2	Y11	2	Y9-Y10				Y9-Y12
16 17	3	Y11-12			3	Year 12-USP Prelim	3	Senior Sec	3	SSC		
18	5	Form 7 University	3	Form 7	5	Form 7 University	3	Form 7			_	3 Foundation/DAEU
19		University				Offiversity	5	FOITH 7		Offiversity		5 University
20				Offiversity								Oniversity

What are international statistical standards?

- They should be common frameworks for collecting and organising information about a particular statistical system
- They should facilitate exchange and comparability of statistical information between countries and agencies
- They are applied to the structure and content of data and metadata, and perhaps to the statistical production process

What is The International Standard Classification of EDucation ISCED?

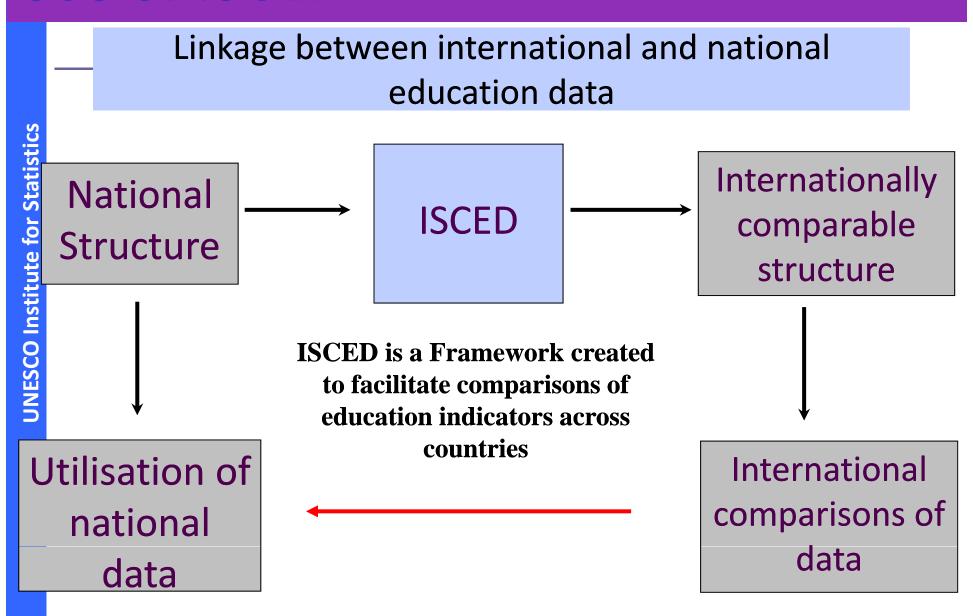
FRAMEWORK to facilitate comparisons of education statistics across countries

METHODOLOGY for translating national educational programmes (and resulting qualifications) into an internationally comparable set of categories Developed and maintained by the UNESCO Institute for Statistics (UIS)

ISCED vocabulary:

unit of classification, scope, crossclassification variables, complementary dimensions

Use of ISCED

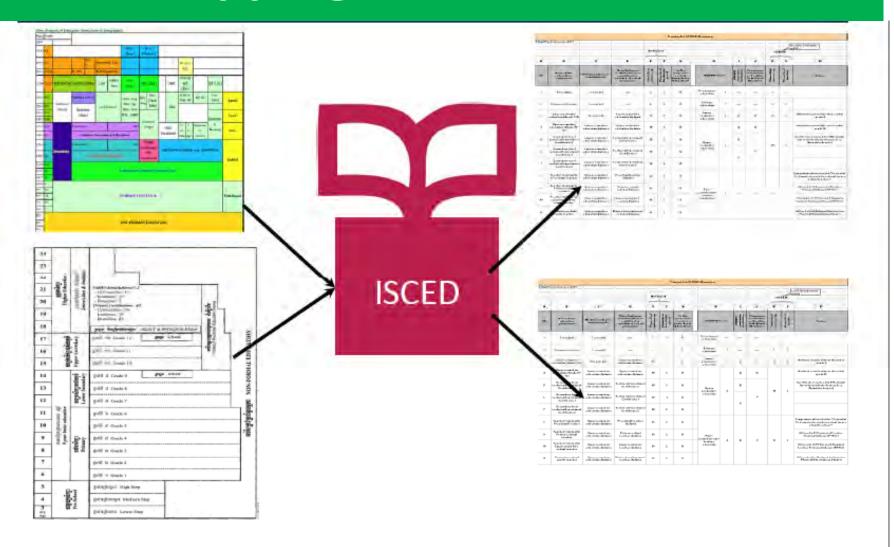


12th Plan Objective

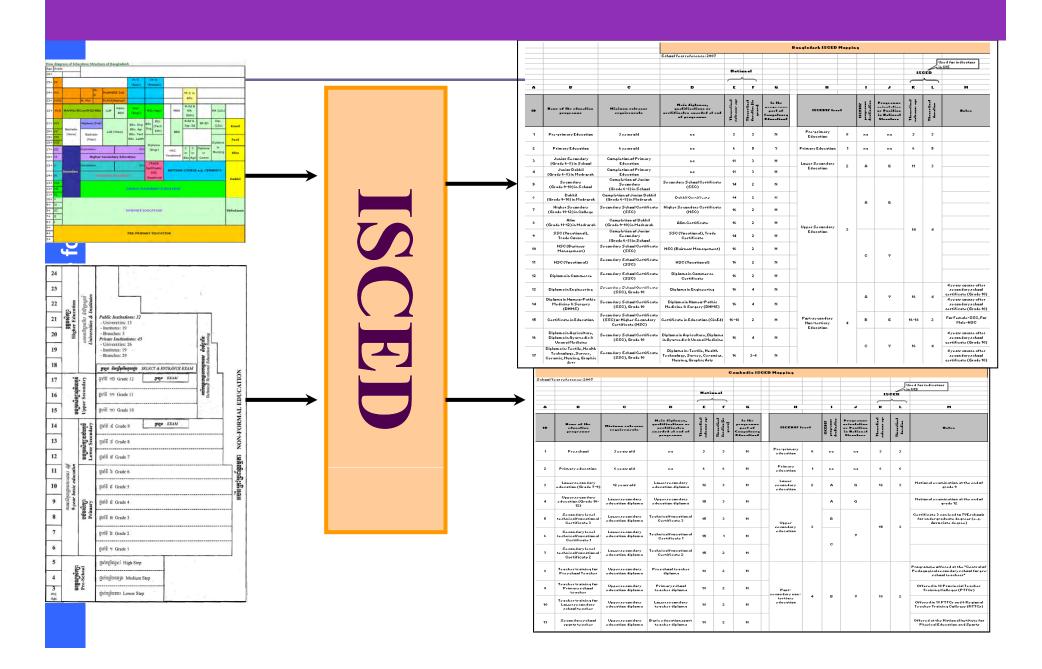
Data collection on higher education should be aligned to the International Standards Classification of Educational (ISCED) Data finalised by UNESCO recently (Twelfth Five Year Plan, 2012-17, Social Sector: Page 121)

Indian Standard Classification of Education (InSCED) is in line with ISCED 2011 and based on InSCED – ISCED mapping of India is finalized.

ISCED mapping



...into international data



		Botswana ISCED Mapping													
			School Year reference: 2007												
			Used for indicators in UIS												
				Natio	nal			ISCED							
A	В	6	D			G		u			,			М	
_ A	B		ı .				ĺ				J			M	
ID	Name of the education Minimum entrance programme requirements		Main diplomas, qualifications or certificates awarded at end of programme	Theoretical entrance age	Theoretical duration (in years)	Is the programme part of Compulsory Education?		ISCED97 level		ISCED97 programme destination	Programme orientation or Position in National Structure	Theoretical entrance age	Theoretical duration	Notes	
Ţ.	Pre Primary	3 years old	na	2.5	3	N		Pre-primary education	0	na	na	3	3		
Stati	Primary	6 years old	Primary School Leaving Examination (PSLE)	6	7	Y		Primary Education	1	na	na	6	7		
	Junior Secondary	Primary School Leaving Examination (PSLE)	junior Certificate	13	3	Y		Lower Secondary Education	2	А	G	13	3		
VV ŽV	Senior Secondary	Junior Certificate	General designation of secondary		g/	Pul	J	псат		ŊS		ce		naps	
WNESCO Institute	University of Botswana Certificate Programme	Junior Certificate	Certificate & Technician Certificate	16	1-2	N		Upper Secondary education		В	G	16	2	Fields: Motor vehicle, Electric and electronic engineering.	
16	Brigades Programme	junior Certificate	Certificate	16	1-2	N				С	V				
ESC	Health Science Diploma	General Certificate of secondary	Diploma	18	3	N		Post-secondary	5	В	First Qualification	18	3	Institute of Health Sciences	
8	Vocational Training Centre (VTC) and Auto Trades Training School (ATTS)	General Certificate of secondary	Certificate	18	1-2			non-tertiary education	5	5 B	V	19	1-2		
9	Bachelor	General Certificate of secondary	Bachelor's Degree	18	4	N			5	A	First Degree	18	4		
10	Master	Bachelor's Degree	Master's Degree	22	2	N		Teritary education (First Stage)			Second Degree`	22			
11	Botswana College of Agriculture	General Certificate of secondary	certificate	18	2	N		(i iiot Stago)		В	First Qualification	18	2		
12	Diploma in Education	General Certificate of secondary	Diploma in Education	18	3	N									
13	Doctorate	Master's Degree	Doctor in Philosophy	24	5	N		Teritary education (second stage)	6			24	5		

Programme orientation (second digit)

The degree to which a programme is specifically oriented towards a predetermined class (or groups) of occupations or trades

2 possible types of *ORIENTATION* for programme content. They are:

General

Technical / Vocational

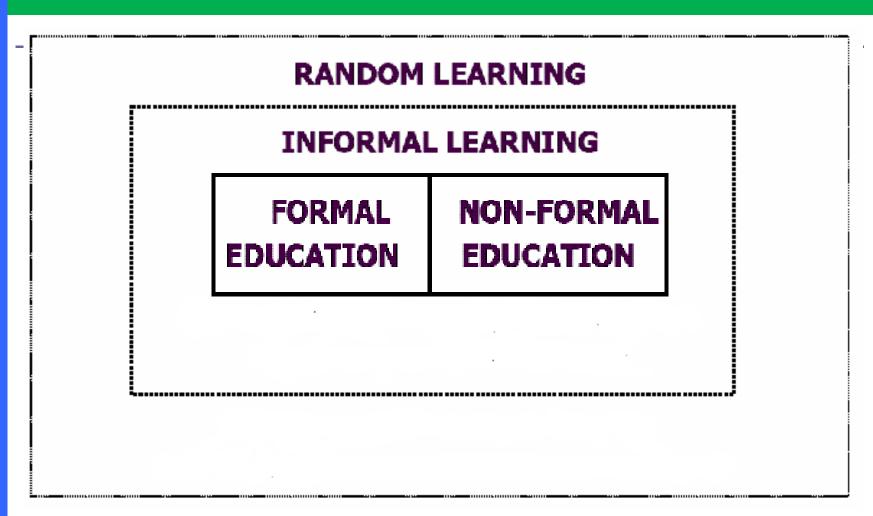
How is ISCED constructed?

- ISCED attempts to classify the curriculum content of education programmes
- Usually by using proxy criteria (main and subsidiary criteria)

Classifying education programmes

- o What is the starting age?
- o What is the typical duration?
- o Minimum duration?
- o What is the orientation?
- o What qualifications do teachers have?
- o What are the entrance requirements?
- o What are the qualifications awarded?
- o What does the programme lead to (destination)?

Scope of education in ISCED



ISCED levels

ISCED 1997	ISCED 2011							
O Pre-primary (designed for children aged 3 years and above)	O Early childhood education O1 Early childhood educational development (designed for children aged under 3 years) O2 Pre-primary (designed for children aged 3 years and above)							
1 Primary (or 1st stage of basic education)	1 Primary							
2 Lower secondary (or 2nd stage of basic education)	2 Lower secondary							
3 Upper secondary	3 Upper secondary							
4 Post-secondary non-tertiary	4 Post-secondary non-tertiary							
5 First stage of tertiary	5 Short cycle tertiary 6 Bachelor's or equivalent level 7 Master's or equivalent level							
6 Second stage of tertiary	8 Doctoral or equivalent level							

Short cycle tertiary education:

- Minimum of 2 years full-time equivalent duration
- often designed to provide participants with professional knowledge, skills and competencies
- Typically practically based, occupationally specific and prepares students to enter the labour market
- May provide pathways to other tertiary education programmes
- Includes academic programmes below bachelor or equivalent.

Bachelor or equivalent:

- First (tertiary) degrees at the Bachelor level have a minimum of 3 years full-time equivalent duration
- Often designed to provide participants with intermediate academic and/or professional knowledge, skills and competencies
- Typically theoretically based but may include practical components and are informed by state of the art research and/or best professional practice
- Traditionally offered by universities and equivalent tertiary institutions
- Do not usually give direct access to Doctorate programmes at ISCED level 8

Master or equivalent:

- First tertiary degrees at the Master level have a minimum duration of at least five years full-time equivalent
- Often designed to provide participants with advanced academic and/or professional knowledge, skills and competencies
- May have a substantial research component, but do not yet lead to the award of a doctoral qualification.
- Typically are theoretically based but may include practical components and are informed by state of the art research and/or best professional practice.
- Traditionally offered by universities and equivalent tertiary institutions
- Usually provide access to Doctorate programmes at ISCED level 8

Doctoral or equivalent:

- Full doctoral degrees have a minimum duration of at least three years full-time equivalent
- Designed to lead primarily to an advanced research qualification
- Devoted to advanced study and original research
- Theses are a significant contribution to knowledge and are of publishable quality
- Typically offered by research-oriented universities and equivalent tertiary education institutions

Level completion and access

Completion/access to higher ISCED levels

- Level completion <u>and</u> access to higher ISCED level
- Level completion (but no direct access to higher ISCED levels)*
- Partial level completion (but no direct access to higher ISCED level)* sequential (ISCED 2-3)
- No level completion (not direct access to higher ISCED levels)
- *Level completion or partial completion / no access (ISCED 2-3)
 - Minimum duration criteria: 2 years within the level
 - Minimum cumulative duration criteria: 8 years and 11 years respectively since the start of ISCED 1

Completion and access (Third digit)

Destination (ISCED 1997) has been replaced by two new concepts:

Completion of an ISCED level

 Successful completion of a programme at the given ISCED level which meets the minimum duration criteria for the level

Access to higher levels of education

 Programmes which give access to other programmes at higher ISCED levels (NB In the case of ISCED 3 access is to programmes at ISCED 5, 6 or 7)

(Source: paras 56-65, ISCED 2011)

Completion and access: sub categories

There are four sub-categories of completion/access:

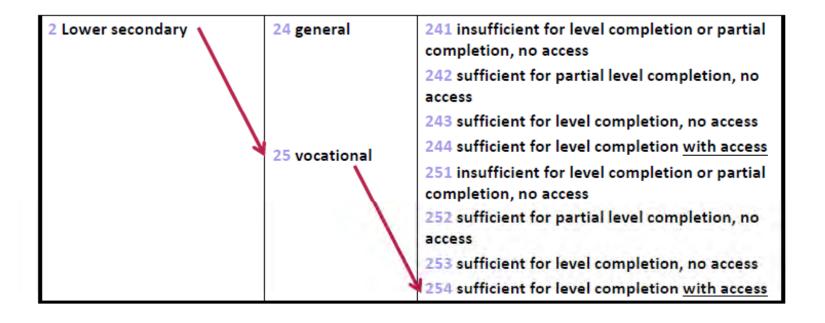
- 1. no completion of level
- 2. partial level completion (ISCED 2 and 3 only)
- 3. level completion without direct access to higher levels
- 4. level completion with direct access to higher levels Partial level completion is used where there is a sequence of two or more programmes within ISCED level 2 or 3.

Successful completion of a programme which is not the last in the sequence of:

- at least 2 years in the level and
- at least 8 years (ISCED 2) or 11 years (ISCED 3) cumulative duration since the beginning of ISCED 1

ISCED 3-digits coding

2 5 4



Discussion questions

- 1. What programmes were easy to re-map?
- 2. What programmes were difficult to remap?
- 3. What new information will be needed for the re-mapping process?
- 4. What would you like further guidance on in the operational manual?

Thank you!

InSCED

INDIAN STANDARD CLASSIFICATION OF EDUCATION

MHRD 03.07.2014

Background

- Needed for the collection, presentation and analysis of educational data
- In absence of any standard classification, educational data produced by different sources, are not comparable
- Different agencies use their own classification to collect and disseminate data

Background

- InSCED had been developed as part of a national framework for the storage, exchange and dissemination of statistical and administrative data on educational activity in India
- The primary consideration in designing InSCED was to cater the requirements of all sectors of Indian Educational System

An additional consideration was to make it comparable with the International Standard

 InSCED has covered two cross-classification variables, Levels and Fields of Education

Committee in Ministry

With Term of Reference

- To develop a National Standard Classification on Education
- To prepare Concordance with International Standard Classification of Education (ISCED)
- Committee sat 3 times
- Sub-group (Statistics Division & Shailendra Sigdel) sat separately twice

Documents referred

- ISCED 1997 & 2011
- ISCED fields of education and training 1997 and 2013
- Australian Education Classification -2001
- National Industrial Classification
- National Product Classification
- National Classification of Occupation
- National Sample Survey (Household survey)
- NCERT Surveys
- DISE
- UGC
- AISHE
- National Vocational Educational Quality Framework (NVEQF)

 Comments were sought from all stake holders and all State Governments

- InSCED a classification of educational programme/ activity and not classification of Educational Institutions (like ISCED)
- InSCED has been designed to classify education according to the Level of education and Field of education (unlike ISCED, here the two have been combined in single document)
- Generally the Levels represent broad steps of educational progression in terms of complexity of educational content
- Field of Education is the subject matter of an educational activity

- Educational Activities first grouped into 16 'Broad Level' alphabetically coded from A through O and X
- further divided into 64 'Narrow Level' with 2-digit numeric code and into 23 'Detailed Level' in case of Level A to E with 3-digit numeric code
- Senior Secondary Education (Level E) has further been divided into Arts, Science, Commerce, Vocational and Other 'Streams' with 4-digit numeric code
 - Vocational School Education divided into 52'Fields' with 6-digit numeric code in 7 broad groups with 5-digit numeric code
- Levels A to E School Education
- Levels F to L Higher Education
- Levels M, N and O pertains to Certificate courses, Inservice Training and Adult Education respectively.

- Fields of education at higher education as a two-level
 hierarchy between broad groups and detailed field (4-digit)
- 35 broad fields and 188 detailed fields
- Rationale for the classification of fields of education is the subject content
- Inter- or multi-disciplinary programmes to be classified according to a majority rule - in which the students spend most of their time
- In case of integrated programme, field to be decided on basis of degree awarded at higher level or on basis of degree awarded later, if fields are at same level
- In case of Choice-based credit system (CBCS), field to be decided on basis of maximum value of core credits

Classification at Single Digit

Level	Level Name	Level	L
Α	Pre-Primary	F	Under Gra
		G	Post Gradu
В	Primary	Н	M.Phil
С	Upper Primary	ı	Ph.D
D	Secondary	J	Diploma
		K	Post Gradu
E	Senior Secondary	L	Integrated

Level	Level Name
F	Under Graduate
G	Post Graduate
Н	M.Phil
ı	Ph.D
J	Diploma
K	Post Graduate Diploma
L	Integrated

Level	Level Name		
M	Certificate		
N	In-service Training		
0	Adult Education		

Higher Education Classification

- Mutually exclusively and Exhaustive
- Different types of programme are classified separately
 - E.g. B.A & B.Ed will be given 2-digit codes 22 and 25 respectively
- Distance mode of education considered separately
- Duration of the programme has been considered

Orientation

- at Under Graduate and Post Graduate Levels
 - fields of education with codes
 - 01 19 Academic orientation
 - 51 66 Professional orientation
- at M.Phil. and Ph.D. Levels all fields –
 Academic
- At Diploma, Post Graduate Diploma and Certificate levels – all fields -Vocational/ Professional

CONCORDANCE

Concordance2014.docx

ConcordanceField2014.docx

Statement showing comparative structure of Indian Standard Classification of Education (InSCED) and the International Standard Classification of Education (ISCED)

A. Single digit Concordance

Indian Standard Classification of Education		Internat	International Standard Classification of Education	
INSCED	(InSCED) 2014	ISCED	(ISCED) 2011	
First digit	Description	First digit	Description	
Code	Description	Code	Description	
	General School Education (Class			
Α	Nursery to Kindergarten)	Level 0	Early childhood education	
В	Primary	Level 1	Primary	
С	Upper Primary	Level 2	Lower secondary	
D	Secondary	Level 3	Upper secondary	
E	Senior Secondary	Level 3	Upper secondary	
F	Under Graduate	Level 5	Short-cycle tertiary	
	onder Gradate	Level 6	Bachelor or equivalent	
G	Post Graduate	Level 7	Master or equivalent	
Н	M.Phil.	Level 7	Master or equivalent	
I	Ph.D.	Level 8	Doctoral or equivalent	
J	Diploma	Level 4	Post-secondary non-tertiary	
		Level 5	Short-cycle tertiary	
К	Post Graduate Diploma including	Level 5	Short-cycle tertiary	
K	Advanced Diploma	Level 7	Master or equivalent	
		Level 6	Bachelor or equivalent	
L	Integrated	Level 7	Master or equivalent	
		Level 8	Doctoral or equivalent	
М	Certificate	Level 3	Upper secondary	
141	Certificate	Level 4	Post-secondary non-tertiary	
N	In-service Training			
0	Adult Education	Level 1	Primary	
Х	Education n.e.c.	Level 9	Not elsewhere classified	

B. Ultimate digit level Concordance

For the purpose of comparison with international classification, two digit code of InSCED at Under Graduate, Post Graduate M.Phil., Ph.D., Diploma, Post Graduate Diploma, Integrated and Certificate Levels should be read with 2 digit code of broad fields of education.

Indian Standard Classification of Education (InSCED) 2014		International Standard Classification of Education (ISCED) 2011	
Code	Description	Code	Description
001	General School Education (Class Nursery to Kindergarten)	010	Early childhood educational development
002	Education at Aanganwadi and Balwadi Centres	020	Pre-primary education
003	Education in Play School		
01	General School Education at Primary level (for Class I to V)	100	Primary education
02	Education Guarantee Scheme/ Alternative & Innovative Education	100	Primary education
03	Non-formal Education at Primary Level	100	Primary education
05	General School Education at Upper Primary level (for Class VI- VIII)	244	Lower Secondary general education - Sufficient for level completion, with direct access to upper secondary education
06	Non-formal Education at Upper Primary Level	244	Lower Secondary general education - Sufficient for level completion, with direct access to upper secondary education
08	General School Education at Secondary level (for Class X-XI)	342	Upper Secondary general education - Sufficient for partial level completion, without direct access to tertiary education
09	Vocational School Education with entry qualification of Class VIII	352	Upper Secondary vocational education - Sufficient for partial level completion, without direct access to tertiary education
101	General School Education at Secondary level with Distance Mode	342	Upper Secondary general education - Sufficient for partial level completion, without direct access to tertiary education
102	Vocational School Education at Secondary level with Distance Mode	352	Upper Secondary vocational education - Sufficient for partial level completion, without direct access to tertiary education
12	General School Education at Senior Secondary level for Class XII	344	Upper Secondary general education - Sufficient for level completion, with direct access to tertiary education
13	Vocational School Education with entry qualification of Class X with duration less than 3 years	353	Upper Secondary vocational education - Secondary vocational education - Sufficient for level completion, without direct access to tertiary education

Indian Stan	Indian Standard Classification of Education (InSCED) 2014		International Standard Classification of Education (ISCED) 2011	
Code	Description	Code	Description	
1411, 1412, 1413	School Education at Senior Secondary level with Distance Mode	344	Upper Secondary general education - Sufficient for level completion, with direct access to tertiary education	
1414	School Education at Senior Secondary level with Distance Mode in Vocational Stream	354	Upper Secondary vocational education - Sufficient for level completion, with direct access to tertiary education	
2101-2116	Education at Under Graduate level through Regular Mode with programme duration of less than 3 years with academic orientation	544	Short-cycle tertiary general education with programme sufficient for level completion	
2151-2168	Education at Under Graduate level through Regular Mode with programme duration of less than 3 years with vocational orientation	554	Short-cycle tertiary vocational education with programme sufficient for level completion	
2201-2216	Education at Under Graduate level through Regular Mode with programme duration of 3 years with academic orientation	645	Bachelor or equivalent with academic orientation leading to first degree with programme duration of 3-4 years	
2251-2268	Education at Under Graduate level through Regular Mode with programme duration of 3 years with professional orientation	655	Bachelor or equivalent with professional orientation leading to first degree with programme duration of 3-4 years	
2301-2316	Education at Under Graduate level through Regular Mode with programme duration of 4 years with academic orientation	645	Bachelor or equivalent with academic orientation leading to first degree with programme duration of 3-4 years	
2351-2368	Education at Under Graduate level through Regular Mode with programme duration of 4 years with professional orientation	655	Bachelor or equivalent with professional orientation leading to first degree with programme duration of 3-4 years	
2401-2416	Education at Under Graduate level through Regular Mode with programme duration of more than 4 years with academic orientation	646	Bachelor or equivalent with academic orientation leading to long first degree with programme duration of more than 4 years	
2451-2468	Education at Under Graduate level through Regular Mode with programme duration of more than 4 years with professional orientation	656	Bachelor or equivalent with professional orientation leading to long first degree with programme duration of more than 4 years	
2501-2516	Second level Under Graduate Education through Regular Mode with academic orientation	647	Bachelor or equivalent with academic orientation leading to Second or further degree, following a Bachelor's or equivalent programme	
2551-2568	Second level Under Graduate Education through Regular Mode with professional orientation		Bachelor or equivalent with professional orientation leading to Second or further degree, following a Bachelor's or equivalent programme	

Indian Standard Classification of Education (InSCED) 2014		Interna	ntional Standard Classification of Education (ISCED) 2011
Code	Description	Code	Description
2601-2616	Education at Under Graduate level through Distance Mode with programme duration of less than 3 years with academic orientation	544	Short-cycle tertiary general education with programme sufficient for level completion
2651-2668	Education at Under Graduate level through Distance Mode with programme duration of less than 3 years with vocational orientation	554	Short-cycle tertiary vocational education with programme sufficient for level completion
2701-2716	Education at Under Graduate level through Distance Mode with programme duration of 3 years with academic orientation	645	Bachelor or equivalent with academic orientation leading to first degree with programme duration of 3-4 years
2751-2768	Education at Under Graduate level through Distance Mode with programme duration of 3 years with professional orientation	655	Bachelor or equivalent with professional orientation leading to first degree with programme duration of 3-4 years
2801-2816	Education at Under Graduate level through Distance Mode with programme duration of 4 years with academic orientation	645	Bachelor or equivalent with academic orientation leading to first degree with programme duration of 3-4 years
2851-2868	Education at Under Graduate level through Distance Mode with programme duration of 4 years with professional orientation	655	Bachelor or equivalent with professional orientation leading to first degree with programme duration of 3-4 years
2901-2916	Education at Under Graduate level through Distance Mode with programme duration of more than 4 years with academic orientation	646	Bachelor or equivalent with academic orientation leading to long first degree with programme duration of more than 4 years
2951-2968	Education at Under Graduate level through Distance Mode with programme duration of more than 4 years with professional orientation	656	Bachelor or equivalent with professional orientation leading to long first degree with programme duration of more than 4 years
3001-3016	Second level Under Graduate Education through Distance Mode with academic orientation	647	Bachelor or equivalent with academic orientation leading to Second or further degree, following a Bachelor's or equivalent programme
3051-3068	Second level Under Graduate Education through Distance Mode with professional orientation	657	Bachelor or equivalent with professional orientation leading to Second or further degree, following a Bachelor's or equivalent programme
3501-3516	Education at Post Graduate level through Regular Mode with programme duration of 2 years or less with academic orientation	747	Master's or equivalent level with academic orientation leading to Second or further degree (following a Bachelor's or equivalent programme)
3551-3568	Education at Post Graduate level through Regular Mode with programme duration of 2 years or less with professional orientation	757	Master's or equivalent level with professional orientation leading to Second or further degree (following a Bachelor's or equivalent programme)

Indian Standard Classification of Education (InSCED) 2014		Intern	ational Standard Classification of Education (ISCED) 2011
Code	Description	Code	Description
3601-3616	Education at Post Graduate level through Regular Mode with programme duration of more than 2 years with academic orientation	747	Master's or equivalent level with academic orientation leading to Second or further degree (following a Bachelor's or equivalent programme)
3651-3668	Education at Post Graduate level through Regular Mode with programme duration of more than 2 years with professional orientation	757	Master's or equivalent level with professional orientation leading to Second or further degree (following a Bachelor's or equivalent programme)
3701-3716	Education at Post Graduate level through Distance Mode with programme duration of 2 years or less with academic orientation	747	Master's or equivalent level with academic orientation leading to Second or further degree (following a Bachelor's or equivalent programme)
3751-3768	Education at Post Graduate level through Distance Mode with programme duration of 2 years or less with professional orientation	757	Master's or equivalent level with professional orientation leading to Second or further degree (following a Bachelor's or equivalent programme)
3801-3816	Education at Post Graduate level through Distance Mode with programme duration of more than 2 years with academic orientation	747	Master's or equivalent level with academic orientation leading to Second or further degree (following a Bachelor's or equivalent programme)
3851-3868	Education at Post Graduate level through Distance Mode with programme duration of more than 2 years with professional orientation	757	Master's or equivalent level with professional orientation leading to Second or further degree (following a Bachelor's or equivalent programme)
4101-4168	Education at M.Phil. level with entry qualification of Post Graduate Level with Regular Mode	758	Master's or equivalent level with academic orientation leading to Second or further degree (following successful completion of a Master's or equivalent programme)
4201-4268	Education at M.Phil. level with entry qualification of Post Graduate Level with Distance Mode	758	Master's or equivalent level with academic orientation leading to Second or further degree (following successful completion of a Master's or equivalent programme)
4501-4568	Education at Ph.D. level with entry qualification of Post Graduate Level with Regular Mode	844	Doctoral or equivalent level with academic orientation and Sufficient for level completion
4601-4668	Education at Ph.D. level with entry qualification of Pd.D. Level with Regular Mode	844	Doctoral or equivalent level with academic orientation and Sufficient for level completion
4701-4768	Education at Ph.D. level with entry qualification of Post Graduate Level with Distance Mode	844	Doctoral or equivalent level with academic orientation and Sufficient for level completion
5101-5168	Education at Diploma Level with entry qualification of Class X with duration of at least 3 years with Regular Mode	454	Post-secondary non-tertiary vocational education Sufficient for level completion with, direct access to tertiary education

Indian Stan	Indian Standard Classification of Education (InSCED) 2014		ational Standard Classification of Education (ISCED) 2011
Code	Description	Code	Description
5201-5268	Education at Diploma Level with entry qualification of Class XII with duration of at least 9 months but less than 2 years with Regular Mode	454	Post-secondary non-tertiary vocational education Sufficient for level completion with, direct access to tertiary education
5301-5368	Education at Diploma Level with entry qualification of Class XII with duration of 2 years or more with Regular Mode	554	Short-cycle tertiary vocational education with programme sufficient for level completion
5401-5468	Education at Diploma Level with entry qualification of Under Graduate or higher Level with duration of at least 9 months but less than 2 years with Regular Mode	657	Bachelor or equivalent with professional orientation leading to Second or further degree, following a Bachelor's or equivalent programme
5501-5568	Education at Diploma Level with entry qualification of Under Graduate or higher Level with duration of 2 years or more with Regular Mode	657	Bachelor or equivalent with professional orientation leading to Second or further degree, following a Bachelor's or equivalent programme
5601-5668	Education at Diploma Level with entry qualification of Class X with duration of at least 3 years with Distance Mode	454	Post-secondary non-tertiary vocational education Sufficient for level completion with, direct access to tertiary education
5701-5768	Education at Diploma Level with entry qualification of Class XII with duration of at least 9 months but less than 2 years with Distance Mode	454	Post-secondary non-tertiary vocational education Sufficient for level completion with, direct access to tertiary education
5801-5868	Education at Diploma Level with entry qualification of Class XII with duration of 2 years or more with Distance Mode	554	Short-cycle tertiary vocational education with programme sufficient for level completion
5901-5968	Education at Diploma Level with entry qualification of Under Graduate or higher Level with duration of at least 9 months but less than 2 years with Distance Mode	657	Bachelor or equivalent with professional orientation leading to Second or further degree, following a Bachelor's or equivalent programme
6001-6068	Education at Diploma Level with entry qualification of Under Graduate or higher Level with duration of 2 years or more with Distance Mode	657	Bachelor or equivalent with professional orientation leading to Second or further degree, following a Bachelor's or equivalent programme
6501-6568	Education at Post Graduate Diploma Level with entry qualification of Under Graduate Level with Regular Mode	751	Master's or equivalent level with professional orientation Insufficient for level completion
6601-6668	Education at Post Graduate Diploma Level with entry qualification of Diploma Level or any other Level with Regular Mode	551	Short-cycle tertiary vocational education Insufficient for level completion

Indian Stan	idard Classification of Education (InSCED) 2014	Interna	ational Standard Classification of Education (ISCED) 2011
Code	Description	Code	Description
6701-6768	Education at Post Graduate Diploma Level with entry qualification of Under Graduate Level with Distance Mode	751	Master's or equivalent level with professional orientation Insufficient for level completion
6801-6868	Education at Post Graduate Diploma Level with entry qualification of Diploma Level or any other Level with Distance Mode	551	Short-cycle tertiary vocational education Insufficient for level completion
7101-7116	Education at Integrated Level leading to Bachelor's Degree with Regular Mode	646	Bachelor or equivalent with academic orientation leading to long first degree with programme duration of more than 4 years
7151-7168	Education at Integrated Level leading to Bachelor's Degree with Regular Mode	656	Bachelor or equivalent with professional orientation leading to long first degree with programme duration of more than 4 years
7201-7216	Education at Integrated Level leading to Master's Degree with Regular Mode	746	Master's or equivalent level with academic orientation leading to Long first degree (at least 5 years)
7251-7268	Education at Integrated Level leading to Master's Degree with Regular Mode	756	Master's or equivalent level with professional orientation leading to Long first degree (at least 5 years)
7301-7368	Education at Integrated Level leading to Doctorate with Regular Mode	844	Doctoral or equivalent level with academic orientation and Sufficient for level completion
7401-7416	Education at Integrated Level leading to Bachelor's Degree with Distance Mode	646	Bachelor or equivalent with academic orientation leading to long first degree with programme duration of more than 4 years
7451-7468	Education at Integrated Level leading to Bachelor's Degree with Distance Mode	656	Bachelor or equivalent with professional orientation leading to long first degree with programme duration of more than 4 years
7501-7516	Education at Integrated Level leading to Master's Degree with Distance Mode	746	Master's or equivalent level with academic orientation leading to Long first degree (at least 5 years)
7551-7568	Education at Integrated Level leading to Master's Degree with Distance Mode	756	Master's or equivalent level with professional orientation leading to Long first degree (at least 5 years)
7601-7668	Education at Integrated Level leading to Doctorate with Distance Mode	844	Doctoral or equivalent level with academic orientation and Sufficient for level completion
8101-8168	Short term Certificate Courses of duration of less than 9 months with entry qualification of Class X with Regular Mode	353	Upper secondary vocational education Sufficient for level completion, without direct access to tertiary education (but may give direct access to post- secondary non-tertiary education)
8201-8268	Short term Certificate Courses of duration of less than 9 months with entry qualification of Class XII with Regular Mode	453	Post-secondary non-tertiary vocational education Sufficient for level completion without, direct access to tertiary education

Indian Standard Classification of Education (InSCED) 2014		Intern	International Standard Classification of Education (ISCED) 2011	
Code	Description	Code	Description	
8301-8368	Short term Certificate Courses of duration of less than 9 months with entry qualification of Under Graduate or higher Level with Regular Mode	554	Short-cycle tertiary vocational education with programme sufficient for level completion	
8401-8468	Short term Certificate Courses of duration of less than 9 months without any entry qualification with Regular Mode	353	Upper secondary vocational education Sufficient for level completion, without direct access to tertiary education (but may give direct access to post- secondary nontertiary education)	
8501-8568	Short term Certificate Courses of duration of less than 9 months with entry qualification of Class X with Distance Mode	353	Upper secondary vocational education Sufficient for level completion, without direct access to tertiary education (but may give direct access to post- secondary non-tertiary education)	
8601-8668	Short term Certificate Courses of duration of less than 9 months with entry qualification of Class XII with Distance Mode	453	Post-secondary non-tertiary vocational education Sufficient for level completion without, direct access to tertiary education	
8701-8768	Short term Certificate Courses of duration of less than 9 months with entry qualification of Under Graduate or higher Level with Distance Mode	554	Short-cycle tertiary vocational education with programme sufficient for level completion	
8801-8868	Short term Certificate Courses of duration of less than 9 months without any entry qualification with Distance Mode	353	Upper secondary vocational education Sufficient for level completion, without direct access to tertiary education (but may give direct access to post- secondary non-tertiary education)	
91	In-Service Training courses for Teachers	999	Education not elsewhere classified	
92	In-Service Training courses for Executives	999	Education not elsewhere classified	
93	In-Service Training courses for Others	999	Education not elsewhere classified	
95	Adult Education	999	Education not elsewhere classified	
99	Education not elsewhere classified	999	Education not elsewhere classified	

Statement showing comparison of Fields of Education in Indian Standard Classification of Education (InSCED) and in International Standard Classification of Education (ISCED)

As International Standard Classification of Education: Fields of Education and Training (ISCED-F) has been revised from 2013; the comparison has been done with ISCED-F 2013 instead of ISCED-F 2011.

Indian Standard Classification of Education: Fields of Education (InSCED-F) 2014		International Standard Classification of Education: Fields of Education and Traini (ISCED-F) 2013			
Code Broad Field/ Detailed Field		Code		Broad Field/ Narrow Field/ Detailed Field	
01		Area Studies	03		Social sciences, journalism and information
				031	Social and behavioural sciences
	0101	Area Studies		0314	Sociology and cultural studies
02		Arts	03		Social sciences, journalism and information
				031	Social and behavioural sciences
	0201	Arts		0314	Sociology and cultural studies
03		Commerce	04		Business, administration and law
				041	Business and administration
	0301	Commerce		0412	Finance, banking and insurance
	0302	Foreign Trade		041	Business and administration
04		Cultural Studies	03	Social sciences, journalism and information	
				O31 Social and behavioural sciences	
	0401	Cultural Studies		0314	Sociology and cultural studies
05		Defence Studies	10		Services
				103	Security services
	0501	Defence Studies		1031	Military and defence
06		Disability Studies	09		Health and welfare
				092	Welfare
	0601	Disability Studies		0921	Care of the elderly and of disabled adults
07		Foreign Language	02		Arts and humanities
				023	Languages
	0701	English		0231	Language acquisition

Indian Sta	indard Classification of Education: Fields of Education (InSCED-F) 2014	International	Standard Classification of Education: Fields of Education and Training (ISCED-F) 2013
Code	Broad Field/ Detailed Field	Code	Broad Field/ Narrow Field/ Detailed Field
0702	French	0231	Language acquisition
0703	German	0231	Language acquisition
0704	Spanish	0231	Language acquisition
0709	Other Foreign Languages	0231	Language acquisition
08	Gandhian Studies	02	Arts and humanities
		022	Humanities (except languages)
0801	Gandhian Studies	0223	Philosophy and ethics
09	Indian Language	02	Arts and humanities
		023	Languages
0901	Bengali	0231	Language acquisition
0902	Hindi	0231	Language acquisition
0903	Kannada	0231	Language acquisition
0904	Malayalam	0231	Language acquisition
0905	Odiya	0231	Language acquisition
0906	Punjabi	0231	Language acquisition
0907	Sanskrit	0231	Language acquisition
0908	Tamil	0231	Language acquisition
0909	Telugu	0231	Language acquisition
0910	Urdu	0231	Language acquisition
0919	Other Indian Languages	0231	Language acquisition
10	Linguistics	02	Arts and humanities
		023	Languages
1001	Linguistics	0232	Literature and linguistics
11	Oriental Learning	02	Arts and humanities
		022	Humanities (except languages)
1101	Jyotisha	0221	Religion and theology
1102	Oriental Learning	0221	Religion and theology

	of Education (InSCED-F) 2014		(ISCED-F) 2013	
Code	Broad Field/ Detailed Field	Code	Broad Field/ Narrow Field/ Detailed Field	
1103	Veda	0221	Religion and theology	
12	Religious Studies	02	Arts and humanities	
		022	Humanities (except languages)	
1201	Buddhist Studies	0221	Religion and theology	
1202	Christian Studies	0221	Religion and theology	
1203	Islamic Studies	0221	Religion and theology	
1204	Theology	0221	Religion and theology	
1205		0221	Religion and theology	
1209		0221	Religion and theology	
13	Science	05	Natural sciences, mathematics and statistics	
		051	Biological and related sciences	
1301	Bio-Chemistry	0512	Biochemistry	
1302	Bio-Science	0511	Biology	
1303	Bio-Technology	0511	Biology	
1304	Botany	0511	Biology	
		053	Physical sciences	
1305	Chemistry	0531	Chemistry	
1306	Electronics	0533	Physics	
		052	Environment	
1307	Environmental Science	0521	Environmental sciences	
		051	Biological and related sciences	
1308	Genetics	0511	Biology	
		053	Physical sciences	
1309	Geology	0532	Earth sciences	
1310	Geo-Physics	0532	Earth sciences	
		051	Biological and related sciences	
1311	Life Science	0511	Biology	

Indian Standard Classification of Education: Fields of Education (InSCED-F) 2014		International Standard Classification of Education: Fields of Education and Training (ISCED-F) 2013			
Code	Broad Field/ Detailed Field	Code	Broad Field/ Narrow Field/ Detailed Field		
		054	Mathematics and statistics		
1312	Mathematics	0541	Mathematics		
		051	Biological and related sciences		
1313	Medical Science	0511	Biology		
		051	Biological and related sciences		
1314	Microbiology	0511	Biology		
		053	Physical sciences		
1315	Physics	0533	Physics		
1316	Science	05	Natural sciences, mathematics and statistics		
		054	Mathematics and statistics		
1317	Statistics	0542	Statistics		
		051	Biological and related sciences		
1318	Zoology	0511	Biology		
1329	Other Science	05	Natural sciences, mathematics and statistics		
14	Social Science	02,03,05	Arts and humanities, Social sciences, journalism and information,		
		031	Natural sciences, mathematics and statistics Social and behavioural sciences		
1401	Anthropology	0314	Sociology and cultural studies		
1101	Tindin opology	022	Humanities (except languages)		
1402	Archaeology	0222	History and archaeology		
1102	The made of the same of the sa	031	Social and behavioural sciences		
1403	Economics	0311	Economics		
		052	Environment		
1404	Geography	0522	Natural environments and wildlife		
		022	Humanities (except languages)		
1405	History	0222	History and archaeology		

Indian Standard Classification of Education: Fields of Education (InSCED-F) 2014			Inte	rnational S	Standard Classification of Education: Fields of Education and Training (ISCED-F) 2013
Co	ode	Broad Field/ Detailed Field		Code	Broad Field/ Narrow Field/ Detailed Field
				031	Social and behavioural sciences
	1406	Human Rights		0312	Political sciences and civics
				054	Mathematics and statistics
	1407	Mathematics		0541	Mathematics
				022	Humanities (except languages)
	1408	Philosophy		0223	Philosophy and ethics
				031	Social and behavioural sciences
	1409	Political Science		0312	Political sciences and civics
	1410	Population Studies		0314	Sociology and cultural studies
	1411	Psychology		0313	Psychology
	1412	Public Administration		0312	Political sciences and civics
	1413	Social Science		0314	Sociology and cultural studies
	1414	Sociology		0314	Sociology and cultural studies
				054	Mathematics and statistics
	1415	Statistics		0542	Statistics
				031	Social and behavioural sciences
	1429	Other Social Science		0314	Sociology and cultural studies
15		Social Work	09		Health and welfare
				092	Welfare
	1501	Social Work		0923	Social work and counseling
16		Women Studies	03		Social sciences, journalism and information
				031	Social and behavioural sciences
	1601	Women Studies		0314	Sociology and cultural studies
51		Agriculture	08		Agriculture, forestry, fisheries and veterinary
				081	Agriculture
	5101	Agriculture		0811	Crop and livestock production
				082	Forestry

Indian Standard Classification of Education: Fields of Education (InSCED-F) 2014		International	Standard Classification of Education: Fields of Education and Training (ISCED-F) 2013			
C	Code Broad Field/ Detailed Field		Code	Broad Field/ Narrow Field/ Detailed Field		
	5102	Forestry	0821	Forestry		
			081	Agriculture		
	5103	Horticulture	0811	Crop and livestock production		
	5104	Sericulture	0811	Crop and livestock production		
52		Criminology & Forensic Science	10	Services		
			103	Security services		
	5201	Criminology & Forensic Science	1032	Protection of persons and property		
53		Design	02	Arts and humanities		
			021	Arts		
	5301	Design	0212	Fashion, interior and industrial design		
	5302	Interior Design	0212	Fashion, interior and industrial design		
54		Education	01	Education		
			011	Education		
	5401	Education (at F,G,H,I,K & L levels)	0111	Education science		
	5401	Education (at J level)	0114	Teacher training with subject specialization		
	5401	Education (at M level)	0113	Teacher training without subject specialization		
55		Engineering & Technology	06, 07	Information and Communication Technologies (ICTs), Engineering, manufacturing and construction		
			071	Engineering and engineering trades		
	5501	Aeronautical Engineering	0716	Motor vehicles, ships and aircraft		
	5502	Agriculture Engineering	071	Engineering and engineering trades		
			073	Architecture and construction		
	5503	Architecture	0731	Architecture and town planning		
			071	Engineering and engineering trades		
	5504	Chemical Engineering	0711	Chemical engineering and processes		
			073	Architecture and construction		

	ndard Classification of Education: Fields of Education (InSCED-F) 2014	International	Standard Classification of Education: Fields of Education and Training (ISCED-F) 2013
Code	Broad Field/ Detailed Field	Code	Broad Field/ Narrow Field/ Detailed Field
5505	Civil Engineering	0732	Building and civil engineering
		071	Engineering and engineering trades
5506	Computer Engineering	0714	Electronics and automation
		072	Manufacturing and processing
5507	Dairy Technology	0721	Food processing
		071	Engineering and engineering trades
5508	Electrical Engineering	0713	Electricity and energy
5509	Electronics Engineering	0714	Electronics and automation
		072	Manufacturing and processing
5510	Food Technology	0721	Food processing
		06	Information and Communication Technologies (ICTs)
5511	Information Technology	061	Information and Communication Technologies (ICTs)
		071	Engineering and engineering trades
5512	Marine Engineering	0716	Motor vehicles, ships and aircraft
5513	Mechanical Engineering	0715	Mechanics and metal trades
		072	Manufacturing and processing
5514	Metallurgical Engineering	0722	Materials (glass, paper, plastic and wood)
5515	Mining Engineering	0724	Mining and extraction
		073	Architecture and construction
5516	Planning	0731	Architecture and town planning
5517	Transportation Planning	0731	Architecture and town planning
5518	Urban Planning	0731	Architecture and town planning
5529	Other Engineering & Technology	071	Engineering and engineering trades
56	Fashion Technology	02	Arts and humanities
		021	Arts
5601	Fashion Technology	0212	Fashion, interior and industrial design

Indian Standard Classification of Education: Fields of Education (InSCED-F) 2014		International	Standard Classification of Education: Fields of Education and Training (ISCED-F) 2013		
Code	Broad Field/ Detailed Field	Code	Broad Field/ Narrow Field/ Detailed Field		
57	Fine Arts	02	Arts and humanities		
		021	Arts		
5701	Fine Arts	0213	Fine arts		
5702	Music	0215	Music and performing arts		
5703	Performing Arts	0215	Music and performing arts		
5704	Visual Arts	0211	Audio-visual techniques and media production		
58	Fisheries Science	08	Agriculture, forestry, fisheries and veterinary		
		081	Agriculture		
5801	Fisheries Science	0831	Fisheries		
59	Home Science	07,09,10	Engineering, manufacturing and construction, Health and welfare, Services		
		072,091,101	Manufacturing and processing, Health, Personal services		
5901	Food Technology	0721	Food processing		
5902	Home Science	1011	Domestic services		
5903	Nutrition	0915	Therapy and rehabilitation		
60	IT & Computer	02,06	Arts and humanities, Information and Communication Technologies (ICTs)		
		061	Information and Communication Technologies (ICTs)		
6001	Animation	0611	Computer use		
6002	Computer Application	0611	Computer use		
6003	Computer Science	0611	Computer use		
		021	Arts		
6004	Graphics	0211	Audio-visual techniques and media production		
6005	Information Technology	06	Information and Communication Technologies (ICTs)		
		021	Arts		
6006	Multi Media	0211	Audio-visual techniques and media production		

Indian Standard Classification of Education: Fields of Education (InSCED-F) 2014		Inte	International Standard Classification of Education: Fields of Education and Training (ISCED-F) 2013				
C	ode	Broad Field/ Detailed Field	Code		Broad Field/ Narrow Field/ Detailed Field		
61		Journalism & Mass Communication	03		Social sciences, journalism and information		
				032	Journalism and information		
	6101	Journalism & Mass Communication	0321		Journalism and reporting		
62		Law	04		Business, administration and law		
				042	Law		
	6201	Civil Law		0421	Law		
	6202	Constitutional Law		0421	Law		
	6203	Cyber Crime		0421	Law		
	6204	International Law		0421	Law		
	6205	Law	0421		Law		
	6206	Civil Law	0421		Law		
63		Library & Information Science	03		Social sciences, journalism and information		
				032	Journalism and information		
	6301	Library & Information Science		0322	Library, information and archival studies		
64		Management	04		Business, administration and law		
				041	Business and administration		
	6401	Agri-Business Management		0413	Management and administration		
	6402	Business Administration		0413	Management and administration		
	6403	Business Management		0413	Management and administration		
	6404	Business Studies		0413	Management and administration		
	6405	Event Management		0413	Management and administration		
	6406	Financial Management		0412	Finance, banking and insurance		
	6407	Hospital Administration		0413	Management and administration		
	6408	Hotel Management		0413	Management and administration		
	6409	Human Resource Management		0413	Management and administration		
	6410	International Business		0416	Management and administration		
	6411	Marketing Management		0414	Marketing and advertising		

Indian Standard Classification of Education: Fields of Education (InSCED-F) 2014		International	Standard Classification of Education: Fields of Education and Training (ISCED-F) 2013	
Code	Broad Field/ Detailed Field	Code	Broad Field/ Narrow Field/ Detailed Field	
6412	Pharmaceutical Technology	0416	Management and administration	
6413	Technology	0413	Management and administration	
6414	Tourism Management	0413	Management and administration	
6429	Other Management	0413	Management and administration	
65	Marine Science/ Oceanography	07	Engineering, manufacturing and construction	
		071	Engineering and engineering trades	
6501	Marine Science/ Oceanography	0716	Motor vehicles, ships and aircraft	
66	Medical Science	04,05,09	Business, administration and law, Natural sciences, mathematics and statistics, Health and welfare	
		091	Health	
6601	Anatomy	0914	Medical diagnostic and treatment technology	
6602	Anesthesiology	0914	Medical diagnostic and treatment technology	
6603	Ayurveda	0917	Traditional and complementary medicine and therapy	
		051	Biological and related sciences	
6604	Bio-Chemistry	0512	Biochemistry	
		053	Physical sciences	
6605	Bio-Physics	0533	Physics	
		054	Mathematics and statistics	
6606	Bio-Statistics	0542	Statistics	
		051	Biological and related sciences	
6607	Bio-Technology	0511	Biology	
		091	Health	
6608	Cardiology	0914	Medical diagnostic and treatment technology	
6609	Dentistry	0911	Dental studies	
6610	Dermatology	0914	Medical diagnostic and treatment technology	
6611	Endocrinology	0914	Medical diagnostic and treatment technology	
6612	ENT	0914	Medical diagnostic and treatment technology	

Indian Standard Classification of Education: Fields of Education (InSCED-F) 2014		International St	andard Classification of Education: Fields of Education and Training (ISCED-F) 2013
Code	Broad Field/ Detailed Field	Code	Broad Field/ Narrow Field/ Detailed Field
6613	Forensic Medicine/ Toxicology	0914	Medical diagnostic and treatment technology
6614	Gastroenterology	0914	Medical diagnostic and treatment technology
6615	General Medicine	0914	Medical diagnostic and treatment technology
6616	General Surgery	0914	Medical diagnostic and treatment technology
6617	Gynaecology	0914	Medical diagnostic and treatment technology
6618	Haematology	0914	Medical diagnostic and treatment technology
6619	Hepatology	0914	Medical diagnostic and treatment technology
6620	Homeopathy	0917	Traditional and complementary medicine and therapy
		041	Business and administration
6621	Hospital Administration	0413	Management and administration
		091	Health
6622	Indian Medicine	0917	Traditional and complementary medicine and therapy
6623	Lab Medicine	0912	Medicine
		041	Business and administration
6624	Medical Management	0413	Management and administration
		091	Health
6625	Medical Physics	0915	Therapy and rehabilitation
		051	Biological and related sciences
6626	Microbiology	0511	Biology
		091	Health
6627	Nephrology	0914	Medical diagnostic and treatment technology
6628	Neurology	0914	Medical diagnostic and treatment technology
6629	Nuclear Medicine	0912	Medicine
6630	Nursing	0913	Nursing and midwifery
6631	Occupational Therapy	0915	Therapy and rehabilitation
6632	Oncology	0914	Medical diagnostic and treatment technology
6633	Ophthalmology	0914	Medical diagnostic and treatment technology

Indian Standard Classification of Education: Fields of Education (InSCED-F) 2014			Inte	International Standard Classification of Education: Fields of Education and Training (ISCED-F) 2013			
Cod	le	Broad Field/ Detailed Field		Code	Broad Field/ Narrow Field/ Detailed Field		
6	6634	Orthopaedics		0914	Medical diagnostic and treatment technology		
6	6635	Pathology		0914	Medical diagnostic and treatment technology		
6	6636	Pediatrics		0914	Medical diagnostic and treatment technology		
6	6637	Pharmacy		0916	Pharmacy		
6	6638	Physiology		0915	Medical diagnostic and treatment technology		
6	6639	Physiotherapy		0915	Therapy and rehabilitation		
6	6640	Plastic Surgery		0914	Medical diagnostic and treatment technology		
6	6641	Psychiatry		0914	Medical diagnostic and treatment technology		
6	6642	Public Health		0914	Medical diagnostic and treatment technology		
6	6643	Radiology		0914	Medical diagnostic and treatment technology		
6	6644	Radiothrapy		0914	Medical diagnostic and treatment technology		
6	6645	Unani		0917	Traditional and complementary medicine and therapy		
6	6646	Urology		0914	Medical diagnostic and treatment technology		
6	6699	Other Medical Science		0914	Medical diagnostic and treatment technology		
67		Physical Education	01		Education		
				011	Education		
6	5701	Physical Education		0114	Teacher training with subject specialization		
6	5702	Yoga		0114	Teacher training with subject specialization		
68		Veterinary & Animal Sciences	08		Agriculture, forestry, fisheries and veterinary		
				084	Veterinary		
6	5801	Dairy Science		0841	Veterinary		
6	5801	Veterinary & Animal Sciences		0841	Veterinary		
99		Not known or unspecified	99		Not known or unspecified		
				999	Not known or unspecified		
9	9999	Not known or unspecified		9999	Not known or unspecified		

Thank you



Need and use of statistics for development policy

Dr Mark Gittoes Head of Analysis for Policy

India Habitat Centre, New Delhi 4th July 2014

HEFCE and statistics

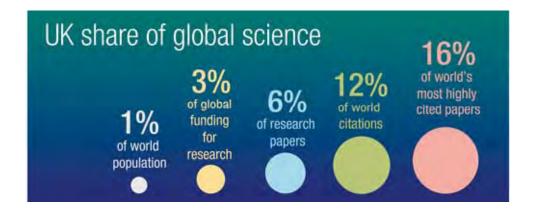
Distribution of public monies to English universities

Ensuring public benefit

Between government and universities

Around 250 staff

45 statisticians



Uses of higher education statistics

Examples

- Funding teaching and research
- Assessing research performance
- Student information and choice
- Institutional enhancement
- Monitoring the health of the system
- Public accountability
- Evidence for policy development



Longitudinal and linked data

- Cohort rather than sample approach
- Higher education records linked to:
 - Achievements at school
 - Financial/loan information
 - Satisfaction survey
 - Employment outcomes
- Understanding of routes into, through and out of higher education

Accountability

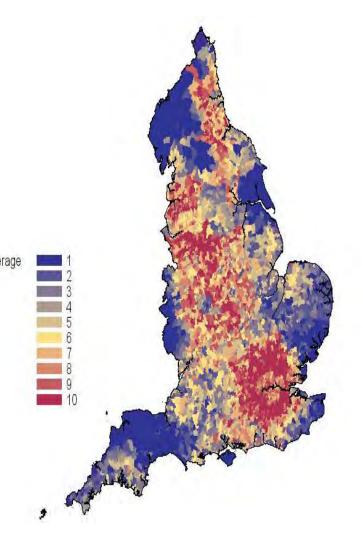
Institutional performance and benchmarking

- Reporting of institutional rates on key indicators:
 - Proportion of disadvantaged students
 - Retention and degree success rates
 - Employment rates after university
- Benchmarks provided to contextualize performance
- Accounts for differences in student profile:
 - Pre-university academic achievements
 - Subjects offered by the university
 - Age of the students

Influencing policy development (1)

Understanding participation

- Identification of cold spots or lack of HE provision
- Interventions supporting development of HE in areas
- Better targeting and understanding of local areas for HE institutions
- Monitoring demand for HE via school trends
- Understanding who does and doesn't participate in HE



Influencing policy development (2)

Retention and HE success

- Identification of student groups with unexplained variations
- Range of measures from retention through to employment
- Different issues for different groups
- Currently focused around:
 - Ethnicity and degree outcomes
 - Employment and postgraduate destinations for disadvantaged

	White	Black	Chinese	Indian	Other Asian	Other / unknown
Starting cohort	181,510	8,465	2,410	10,325	10,835	12,215
Degree-qualified	83.1%	73.8%	87.2%	84.1%	77.7%	78.4%
First or upper second	56.1%	31.3%	50.7%	45.8%	35.9%	49.2%
Degree & employed or studying	72.8%	60.5%	68.6%	70.3%	62.3%	65.7%
Degree & graduate job or study	48.4%	37.7%	53.2%	51.1%	42.6%	46.2%



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