



Higher Education Commission

Prof. Dr. Arshad Ali
Executive Director, HEC

January 10, 2017



In the name of Allah , the Most Gracious , the Most Merciful



Introduction



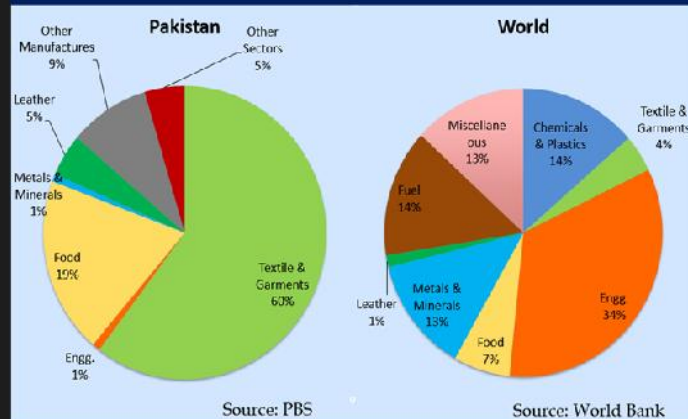
Education Statistics

- Science & Technology Education is the key determinant of progress of any nation.
- 30 Mil youth in University Age Group
- 2.6 Mil in Higher Education Institutes (8.6%),
- Less than 1 Mil in Science & Technology Programs



world

Export product mix (2015 figures)



Where to focus for research impact ?

Core Strategic Aims and objectives of HEC

Equitable Access, Quality & Standards

- Enhancing Nation wide Equitable Access
- Quality & Standards consistent with Global HE Standards
- Create a Critical Mass of qualified Human Resources
- Qualified Faculty with Advanced Degrees

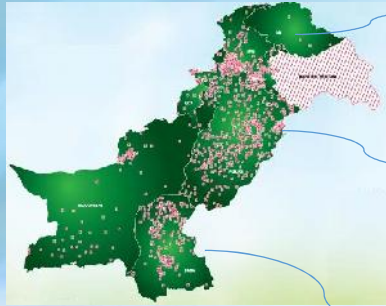
Technology Readiness

- Nation wide availability and use of ICTs
- Provide necessary Scientific Equipment and Technology resources for High Quality Research
- Provide PERN3 Facilities through Global high speed connectivity
- Digital research and instructional Resources for faculty and students

Research & Innovation

- Universities, Industry & Government nexus
- Knowledge Economy
- Critical National Problems and solutions
- Discovery of new knowledge, competences and skills in Engineering specializations
- Solve critical national problems and create indigenous solutions

Enhancing Equitable Access



Students Enrollment in Universities (2010-2016)



Pre 2013: 1.15 Million

Post 2013: 1.348 Million

Increase in Students Enrollment during Last three Years

16.3%

Female Participation in the Universities

47.8%

Source : HEC Data Bank

Recognized Universities(2010-2016)



Increase in No. of
Higher institution from
2014 to 2016

19

As desired by the
Govt. of
Pakistan, HEC is
Planning to
establish a
University or its
campus in every
district of Pakistan
by **2017-18**

Pre 2013: 152

Post-2013: 180

Source : HEC Data Bank

Faculty Members at Universities(2010-2016)



No. of PhD Faculty at HE
Institutions in 2013

7,798

No. of PhD Faculty at HE
Institutions in 2015

9,935

Pre 2013: 37,027

Post-2013: 46,026

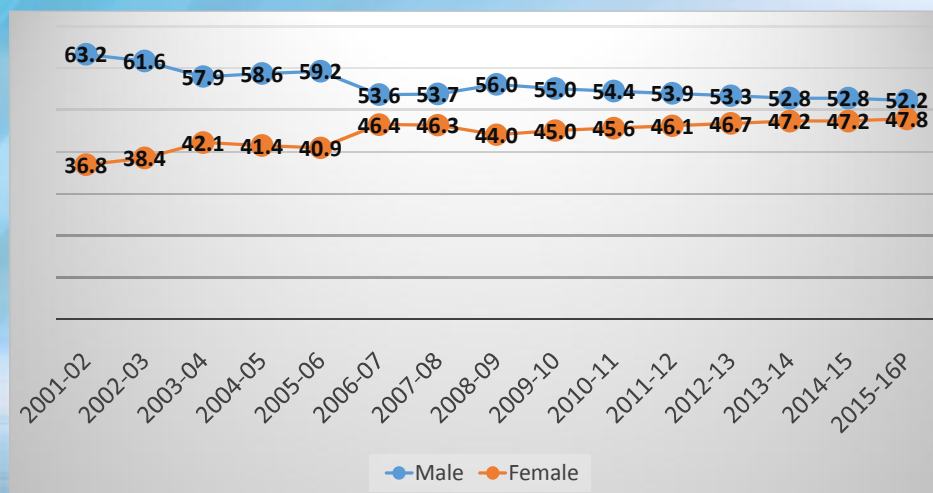
Source : HEC Data Bank

No. of PhDs Produced by Pakistani Universities/HEIs



* Data is being received and entered

Gender Wise Enrollment



Female Enrollment in HEI

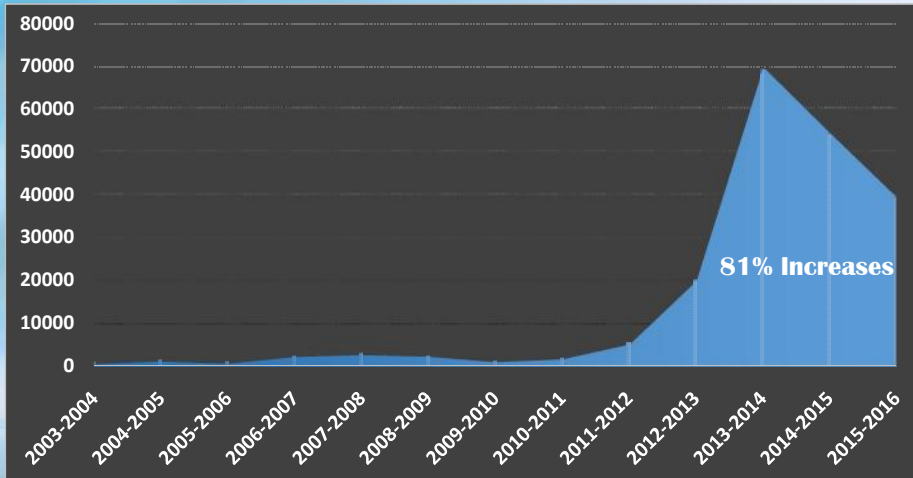
612,300

Female Participation in Universities

47.8%

Source : HEC Data Bank

Scholarships Awarded



No. of All Scholarships awarded in 2010-2013

26,636

No. of all Scholarships awarded in 2014-16

162,228

58% Awarded to Students from Rural areas and Small cities

Source : HEC Data Bank

Need Based Scholarship Program

35,575

Total Awardees in last three years

**Worth
Rs. 6 Billion**

100+

Participating universities all over PAKISTAN

47%+

Female Students ratio in Foreign funded programs

5

Big Programs- local and foreign funded



Prime Minister's Fee Reimbursement Scheme for Underserved/ Less Developed Areas



114/ 129 Districts of Pakistan Covered



98,000+ Students benefited



2010-2013: Rs. 0.5 Billion



2014-16: Rs. 4.5 Billion

Enhanced opportunities for access to higher education especially to talented but financially constrained students belonging to remote and underserved areas of the country

Quality & Standards



Quality & Standards of Higher Education & Research(Conti)

National Qualification Framework-2016

15 Accreditation Councils developed Programmatic Accreditation standards

Streamlined Recognition, Verification & Equivalence of Degrees

HEC's Recognition of Institutions & Universities

International Ranking of Programs & Universities

Quality & Standards of Higher Education & Research (Conti.)

Standards of Bachelors, Masters and PhDs. Program approval

Criteria for Award of Masters and PhD. Degrees

Eligibility Criteria for Faculty Appointment, Retention and Promotion

Quality Assurance & Enhancement (QECs)

Quality & Standards of Higher Education & Research(Conti.)

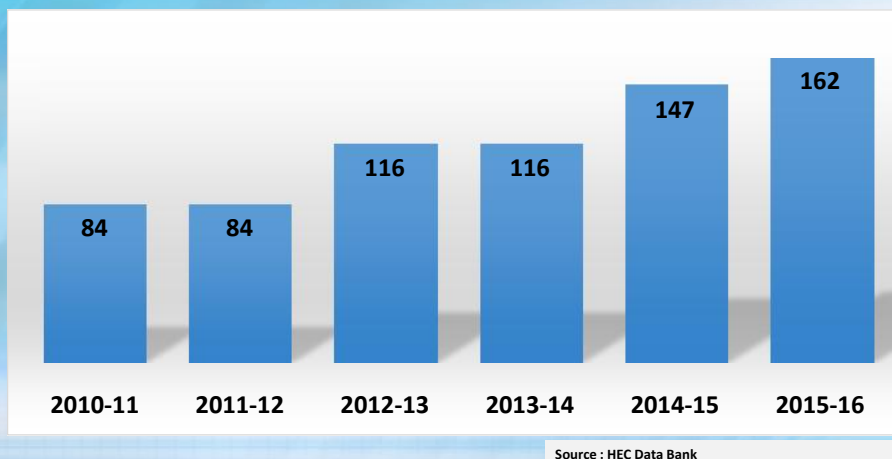
Relevance and Upgradation of Curricula , NCRC processes revised

Criteria for Appointment of Vice- Chancellors /Rectors

Criteria for of appointment of Prof.
Emeritus, Meritorious Professors Senior
Management &

Criteria for Recognition of Conferences and research Journals

Internal Quality Assurance-Growth of Quality Enhancement Cells



No of QECs
established for last
three years in the
Universities

46

The objective of IQA section is that all the HEC's recognized HEIs of Pakistan have established their Quality Enhancement and Assurance Cell and strive to achieve W level of IQA mechanism.

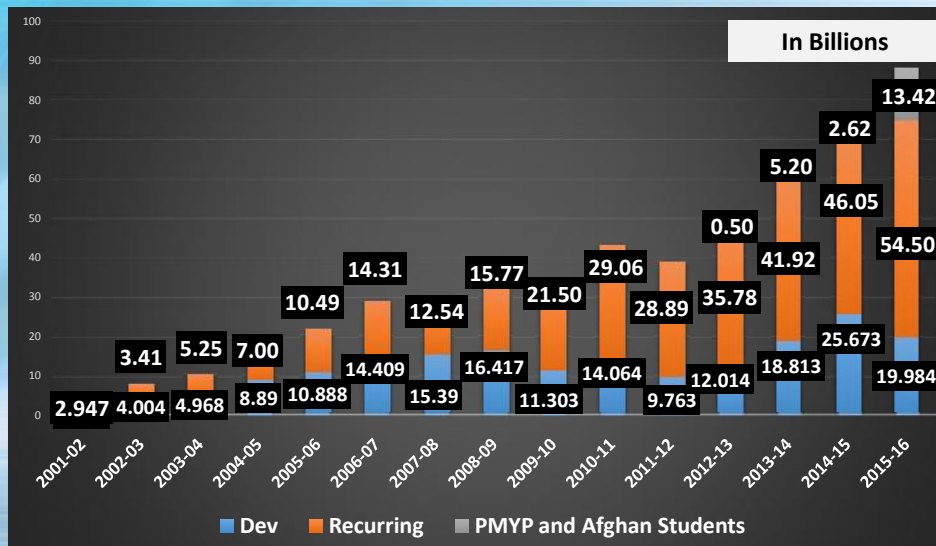
External Quality Assurance

Sr.	QAA's Sections	Progress
1	External Quality Assurance[EQA]-Program Level-Post Graduate [MS/MPhil & PhD] <ul style="list-style-type: none"> The objective is to assure compliance of HEC's minimum criteria for these programs and enhance their quality to make them internationally compatible. 	PhD Programs: <ul style="list-style-type: none"> Total DAIs reviewed: 47 Total Programs reviewed: 301 Action taken till 2014-15: 31 programs stopped further intake till compliance with criteria. 11 programs closed MS/MPhil Programs: <ul style="list-style-type: none"> Total DAIs reviewed: 10 Total Programs Reviewed: 97 Action taken till 2014-15: 21 programs stopped for further intake, 12 programs closed
2	External Quality Assurance[EQA]-Program Level-Under Graduate <ul style="list-style-type: none"> Objective of this section is to assure that all the undergrad level programs of HEIs are accredited by its respective accreditation council. 	<ul style="list-style-type: none"> Total No. of Councils: 15 Total No. of HEC's Established Councils: 5 Two more accreditation councils i.e. Allied Health Sciences, and Life Sciences have been approved by the Commission. Total Programs :2531 Programs Accredited: 1753

External Quality Assurance

Sr.	QAA's Sections	Progress
4	External Quality Assurance[EQA]-Institute Level The objective is to evaluate and certify the overall performance of an HEI.	HEIs Reviewed: <ul style="list-style-type: none"> Against 11 standards: Total DAIs reviewed till date: 37 HEIs Against 2 Standards i.e. Governance and Quality: 171 HEIs

Progress of Higher Education Funding

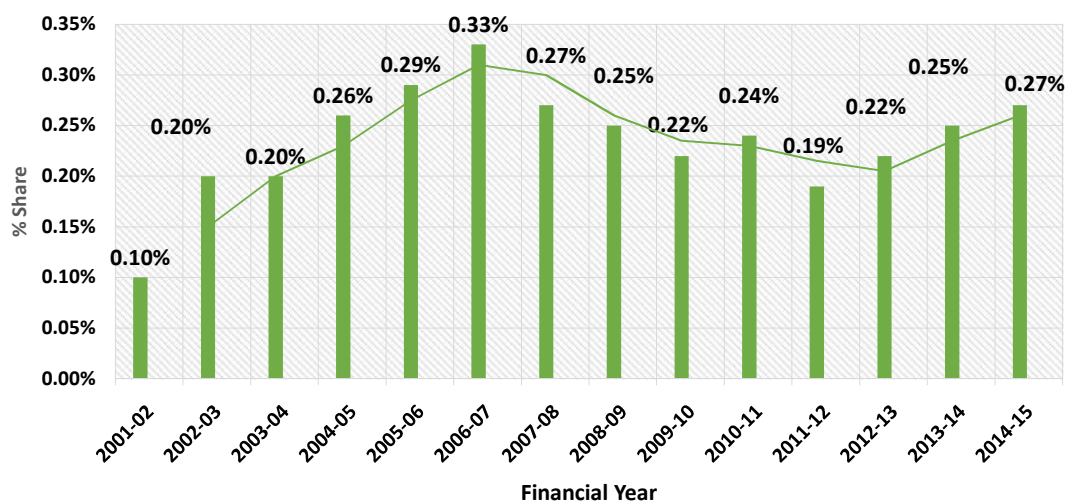


Increase in the Higher Education Commission Grants for last three Years

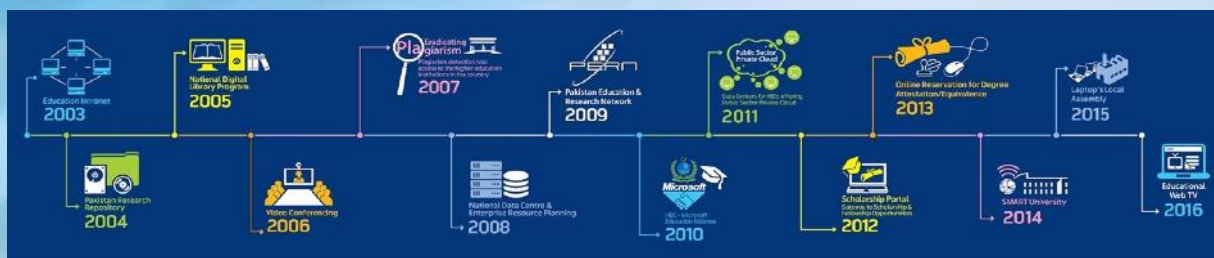
82%

Source : HEC Data Bank

Allocation to HE Sector Relative to GDP%



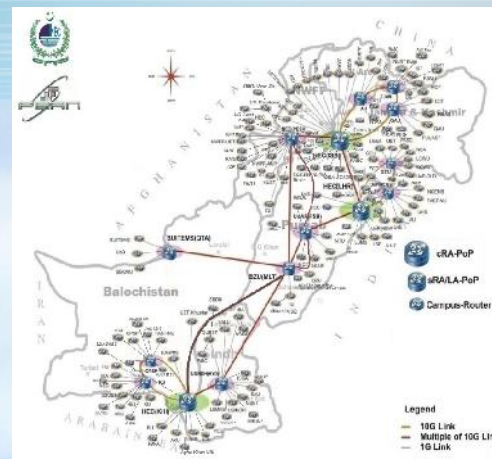
Technology Readiness



Developments in PERN2

• CURRENT STATUS (2016)

- **248** Universities\ Colleges connected in **57** Cities
- **15** Gbps (10 PTCL + 5 TWA) Internet Bandwidth
- **37** New universities will join PERN2 by Dec, 2016
- **6** Gbps of Core Intranet Bandwidth Utilization.
- IPLC upgraded from **155**Mbps to **1**Gbps with average utilization of **800**Mbps
- Providing advance service, viz. IP MPLS, IPv6, IP Multicast, Advance Voice and Video Communication.



PERN3- Plans for Upgrading

• PERN3 by 2017:

- Establish **40Gbps/ 100Gbps** Backbone Long Haul Transmission
 - Up-Gradation of ADM sites from 10G to 40/100G
 - Bifurcation of Transmission Rings
 - New ADM/OLA Sites
- Upgradation of complete Core Equipment/ routers.
- Conversion of old with new updated technology
- Up-gradation of Campus equipment with 10Gbps Support.
- Expansion of PERN-III footprint to new cities/ regions.
- **10 Gbps** last Mile Media shall be required for the universities

Digital Library and Archives – Available to all HEIs across Provinces



- E-Journals & E-Books
 - 2013: 70 K
 - 2015: 1.5 Million
- Budget
 - 2013: Rs. 907 Million
 - 2015: Rs. 935 Million



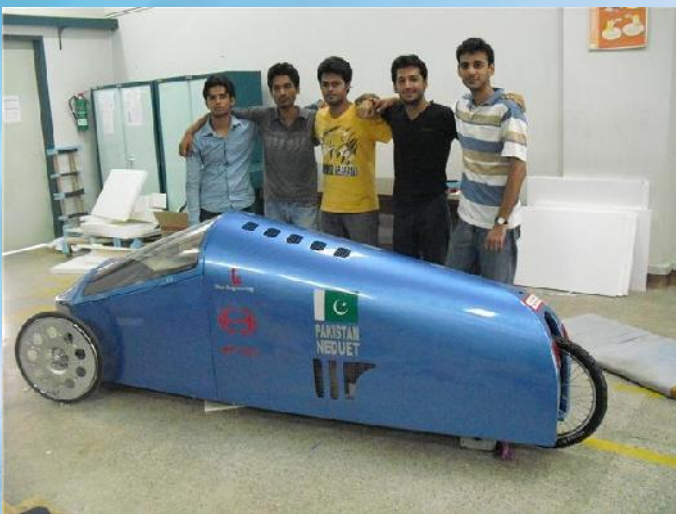
Prime Minister's (National) Program for Provision of Laptops to Talented Students



Laptops

- 500,000 Laptops for
- MS, M.Phil. & PhD scholars in public sector HEI's
- Polytechnic students
- Students of 4-year Bachelors Program
- Students of 1 or 2-year Master's Degree Program
- Budget Rs. 26.46 Billion(2013-2018)

Research, Innovation & Commercialization



Creating Knowledge through Research Publications



Increase in Research Publications for last 05 years

41%

Year	No of Publications
2010	5038
2011	6401
2012	6594
2013	7394
2014	8067
2015	9359

Creating Knowledge through Research Publications



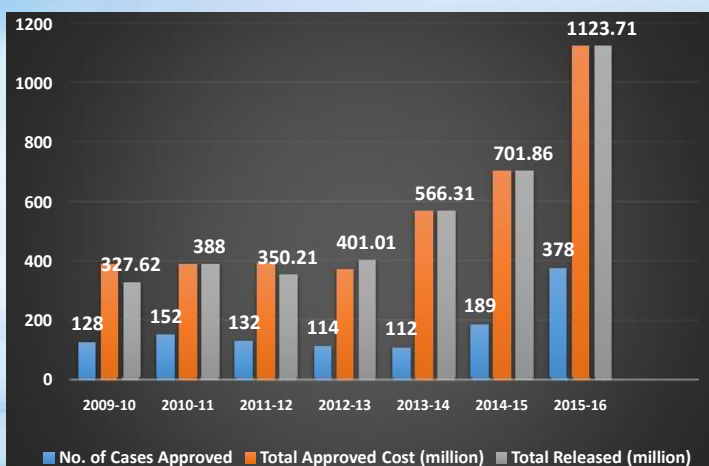
Pakistan has emerged as a country with highest percentage of highly cited papers as compared to BRIC countries (Brazil, Russia, India and China). Citations are acknowledgments by the scientific community of useful findings and advances that add significantly to the ongoing research and its marketability

THOMSON REUTERS

Source : <http://ip-science.interest.thomsonreuters.com/incites-pakistan/>

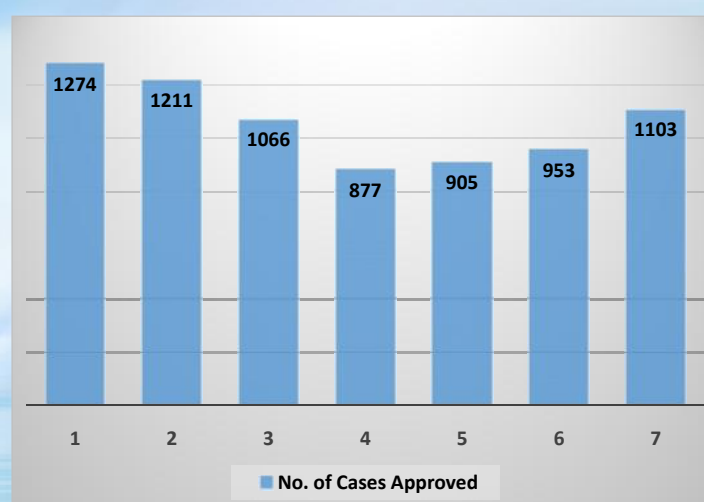
NATIONAL RESEARCH PROGRAM FOR UNIVERSITIES (NRPU)

Calendar Year	No. of Cases Approved	Total Approved Cost (million)	Total Released (million)
2009-10	128	386.98	327.62
2010-11	152	388.00	388.00
2011-12	132	390.21	350.21
2012-13	114	370.01	401.01
2013-14	112	566.31	566.31
2014-15	189	701.86	701.86
2015-16	378	1123.71	1123.71
Total	1229	5027.08	3988.72



Travel Grant: No. of Approved Cases along with Sanctioned Budget

Calendar Year	No. of Cases Approved	Sanctioned Amount (in Million)
2010	1274	175.575
2011	1211	175.213
2012	1066	168.295
2013	877	151.025
2014	905	148.705
2015	953	133.401
2016	1103	167.786
Total	7389	1120



HEC Support to Universities

Program	Status 2001 to 2013	2013 to 2016
Establishment of ORIC	28	48
Establishment of BICs	13	20
Patent Filed Patents Granted	44 13	87 32
Approved Projects : Knowledge Economy Partnership Program	16	30 Projects

QS World Ranking-Asia

2012		2013		2014		2015		2016	
University	Rank	University	Rank	University	Rank	University	Rank	University	Ranking
NUST	108	QAU	119	PIEAS	106	PIEAS	115	LUMS	111
UOK	191-200	NUST	120	AKU	116	QAU	116	NUST	112
AKU	201-250	AKU	151-160	QAU	123	AKU	117	QAU	149
UET Lhr	201-250	LUMS	191-200	NUST	129	NUST	119	PIEAS	149
LUMS	251-300	UET Lhr	201-250	LUMS	181-190	LUMS	161-170	AKU	183
Uo Lhr	251-300	UoK	201-250	COMSATS	201-250	COMSAT	201-250	Uo Karachi	201-210
		Uo Punjab	201-250	UOK	201-250	Uo Punjab	201-250	Uo Punjab	221-230
				UOPunjab	201-250	UAF, Fsd	251-300	COMSAT	231-240
				UAF, Fsd	251-300	UET, Lhr.	251-300	UET Lhr.	241-250
				UET Lhr	251-300	Uo Karachi	251-300	UAF Fsd	301-350
Total HEIs= 6		Total HEIs= 7		Total HEIs= 10		Total HEIs= 10		Total HEIs = 10	

Source : <http://www.topuniversities.com/university-rankings/asian-university-rankings/2016>

Thank You

