The world has been transformed in the last several decades into one where knowledge is now the engine for socio-economic development, and importance of natural resources has greatly diminished. Knowledge based economy has now taken over and higher education has a pivotal role in the development and economic growth of any country.

Higher Education Commission (HEC) since its inception in 2002 has been striving hard to encourage universities to play a greater role in economic development of the country. After implementing Medium Term Development Framework (MTDF) 2005 – 2010, HEC has proposed next five year plan viz. second MTDF – 2010 – 2015 to create knowledge capital and technology required to enable Pakistan to join the ranks of the industrially advanced countries within the next decade. The few prime physical targets of the proposed 5-year plan are:

(i) Promoting Excellence in Learning and Research
(ii) Developing Leadership, Governance and Management
(iii) Universities Building Economies & Communities
(iv) Financial Management & Sustainability
(v) Research, Innovation & Entrepreneurship

Key achievements of the Higher Education Commission are as under:

**HUMAN RESOURCE DEVELOPMENT**

Human Resource Development within the higher education sector lies at the heart of the HEC’s reform process, and an area in which vital and significant progress has been made. With a dual objective of increasing institutional capacity and enhancing local research activities, the major thrust of programmes in this area have been primarily aimed at improving the academic qualifications of university faculty. However, scholarships schemes are also open to individuals working in the private sector or to the government servants as well as Pakistani students.

**Projects/Programmes**

<table>
<thead>
<tr>
<th>Project Name</th>
<th>Scholarships Availed</th>
<th>Scholars Completed Studies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provision of HE Opportunities for Students of Balochistan / and FATA</td>
<td>2000</td>
<td>28</td>
</tr>
<tr>
<td>Japanese Need Based Merit Scholarship Programme</td>
<td>950</td>
<td>935</td>
</tr>
<tr>
<td>Financial Support for Meritorious Needy Students Programme</td>
<td>165</td>
<td>148</td>
</tr>
<tr>
<td>Indigenous PhD Scholarship Schemes</td>
<td>1512</td>
<td>819</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Project Name</th>
<th>Faculty Placed in HEIs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interim Placement of Fresh PhDs Prog.</td>
<td>692</td>
</tr>
<tr>
<td>Project Name</td>
<td>Scholarships Awarded</td>
</tr>
<tr>
<td>------------------------------------------------------------------------------</td>
<td>---------------------</td>
</tr>
<tr>
<td>Post-Doctoral Fellowship Programme</td>
<td>590</td>
</tr>
<tr>
<td>1000 Cuban Scholarships for Studies in General Comprehensive Medicine</td>
<td>604</td>
</tr>
<tr>
<td>US needs based Scholarship Programme for Pakistani University Students</td>
<td>901</td>
</tr>
<tr>
<td>MS / M. Phil leading to PhD Scholarships for teachers of Weaker Universities</td>
<td>21</td>
</tr>
<tr>
<td>MS leading to PhD Faculty Development Programme of UESTP/UETs</td>
<td>189</td>
</tr>
<tr>
<td>Overseas scholarship scheme for PhD in selected fields Phase – 1</td>
<td>19</td>
</tr>
<tr>
<td>Overseas Scholarships Phase-II</td>
<td>1439</td>
</tr>
<tr>
<td>Fulbright Scholarship Programme Programme</td>
<td>233</td>
</tr>
</tbody>
</table>

**RESEARCH & DEVELOPMENT**

**International Linkages**

- 50 International linkages between Pakistani and UK universities were established during three years through HEC-British Council Joint programmes Phase 1 and 2.

- 17 strategic partnerships have been established between Pakistan and UK under HEC-BC INSPIRE project in 2011 for duration of three years.

- 50 Pak-US linkages of three years duration were established under the development project of “Pak-US Joint Academic and Research Project” Phases 1 to 4.

- 6 research linkages between Pakistan and USA are developed under “Bio Engagement Programme” in 2010.

- 31 international research linkages were established with different countries for duration of three years under “International Linkages with Foreign Universities”.

**Funds allocated for Promotion of Research**

![Graph showing funds allocation from 2002-03 to 2010-11](image)

- **Rs in Million**
  - 2002-03: 47
  - 2003-04: 270
  - 2004-05: 300
  - 2005-06: 442
  - 2006-07: 650
  - 2007-08: 680
  - 2008-09: 726
  - 2009-10: 800
  - 2010-11: 800
Fellowships for short international visits
40 Sabbatical / Duty Leave fellowships of 3 to 9 months duration were given to senior faculty members for international research under the project “Sabbatical / Duty Leave Fellowship Programme”. Forty four indigenous faculty members visited abroad for duration of one month to develop research proposals while 11 foreign experts visited Pakistan under “Pakistan Programme for Collaborative Research”.

National Research Grants
• Under this mega project 597 national projects were funded with the maximum duration of three years with the consumption of Rs. 1463 million

• 4068 cases of “Travel Grants” and 394 cases of “Seminars/Conferences” were approved.

Provision of Scientific Services / Software
• 261 cases were approved and processed under the project “Provision of Grant to Public Sector Universities / Degree Awarding Institutes (DAIs) for Maintenance / Up-gradation of Scientific Equipment”.

• Similarly 2000 cases were approved and processed under “Access to Scientific Instrumentation Project” to provide spectroscopic, analytical and chromatographic services to post graduate researchers and faculty.

• Under the project “Country Licenses of Advanced Design Software”. In 2010, HEC has provided 14 Civil Engineering software to 8 Engineering Universities of Pakistan and provided training to faculty.

Resource Development
• 24 research awards were distributed in five different categories in 2009 while 33 awards were given in 2011 ceremony under the project “HEC’s Outstanding Research Awards Series”.

• 55 books were published by HEC in these 5 years under development project of R&D, “Monograph and Textbook Writing Scheme”. 28 patents were filed under “Patent Filing” project.

• 10 projects each of two years were completed in “University Industry Technology Support Programme”. Under the project “Offices of Research, Innovation and Commercialization”, research offices have been developed in 14 Pakistani Universities to promote research within universities.
LEARNING INNOVATION at HEC
Following training programmes are the initiatives of HEC towards building qualitative pool of academics and management staff at learning institutions of Pakistan.

- LI’s Master Trainers-Faculty Professional Development Programme (FPDP)
- International Advanced Specified Programme for MT-FPDP
- Indigenous Advanced Specified Programme for MT-FPDP Alumni
- National Academy of Higher Education (NAHE’s) Professional Competency Enhancement Programme for Teachers (PCEPT) / Staff Development Courses (SDC)
- English Language Teaching Reforms (ELTR’s) Indigenous scholarships upto M Phil level
- NAHE’s Incorporating Technology in Education Programme (ITE)
- LI’s Orientation & Awareness Program on HEI’s Semester /Examination Systems
- International Resource Person’s (IRP) Training
- ELTR’s Continuous Professional Development Courses
- LI’s Continuous Professional Development Seminars/Workshops
- Modern University Governance (MUG) Programme

Province-Wise Distribution of Faculty Members/Management Staff Trained

<table>
<thead>
<tr>
<th>Programs</th>
<th>Federal</th>
<th>Punjab</th>
<th>Sindh</th>
<th>KPK</th>
<th>Balochistan</th>
<th>AJ&amp;K</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number of Universities</td>
<td>21</td>
<td>18</td>
<td>13</td>
<td>15</td>
<td>05</td>
<td>02</td>
<td>74</td>
</tr>
<tr>
<td>HE Faculty Trained</td>
<td>970</td>
<td>2146</td>
<td>1279</td>
<td>1347</td>
<td>573</td>
<td>114</td>
<td>6429</td>
</tr>
<tr>
<td>Management Staff Trained</td>
<td>94</td>
<td>103</td>
<td>87</td>
<td>71</td>
<td>39</td>
<td>7</td>
<td>401</td>
</tr>
<tr>
<td>Grand Total</td>
<td>1085</td>
<td>2267</td>
<td>1379</td>
<td>1433</td>
<td>617</td>
<td>123</td>
<td>6904</td>
</tr>
</tbody>
</table>

QUALITY ASSURANCE PROGRAMMES
Following quality parameters have been developed and implemented to fill the gaps in quality provision between National and International Systems of higher learning:

Tenure Track System (TTS)
Tenure Track System (TTS) of appointments is introduced in public sector universities; it aims at enhancing performance and efficiency of the faculty members by creating a healthy competition among faculty members, allowing freedom of research and teaching, as well as the financial independence to pursue these objectives.
• Tenure Track System (TTS) appointments: Version: 2.0,

• 1378 faculty members have been appointed by 58 Public Sector Universities / DAIs till date.
  a. Professors : 204
  b. Associate Professor : 47
  c. Assistant Professors : 1127
  d. Total………………… :1378

Eligibility Criteria for Faculty Appointment (Lecturer to Professor in all Disciplines) HEIs
  ❑ Booklets of the Criteria are published as and when revised and circulated among all the HEIs.

Support to HEC Recognized Research Journals

❑ HEC recognized Journals: 181
❑ Social Sciences: 100
❑ Sciences: 74
❑ Multidisciplinary Category: 07
  ❑ The Journal are categorized as;
❑ W : All impact factor Journal
❑ X: Internationally indexed & reviewed Journals
❑ Y: Locally reviewed Journals
❑ Z: Regularly published Journals

Pakistani Impact Factor Journals
Eleven Pakistani Science journals have got impact factor, as a result of HEC initiatives to Support Recognized Journals.
  1. Asian Journal of Animal & Veterinary Advances
  2. Pakistan Journal of Botany
  3. Journal of the Chemical Society of Pakistan
  4. Pakistan Journal of Pharmaceutical Sciences
  5. Pakistan Journal of Medical Sciences
  6. Pakistan Journal of Zoology
  7. Pakistan Journal of Statistics
  8. Pakistan Veterinary Journal
  10. Journal of Animal & Veterinary Advances
  11. Journal of Pakistan College of Physicians and Surgeons

Impact of HEC Support to Research Journals: Due to continuous support to research journals, HEC has achieved remarkable progress and now research output of Pakistan is more visible at international level. Almost 45 research journals are now in the ISI Master list with 11 journals having impact factor.
Plagiarism Policy Implementation and Cases Processed
- Plagiarism Policy was circulated among all public and private sector Universities on September 27, 2007.
- Total 114 cases have been reported to the HEC
- 94 cases are closed after proper investigation as per policy
- Rest of the cases are under process
- Some Universities/Institutions are reluctant to initiate inquiry process

Impact of Plagiarism Policy:
- Due to Zero Tolerance policy of the HEC towards Plagiarism, it has positive impact on research activities being carried out in the Higher Education Institutions and R&D organization. Awareness about proper documentation, literature referred during research activities has been improved and researchers are more vigilant in citing information in their scholarly works.

Developed Criteria / Policy Guidelines implemented in HEIs
- Different QA Criteria has been developed e.g. PhD criteria, Faculty appointment criteria, Recognition of Journals, Affiliation etc.
- To ensure the quality of higher education in Pakistan, follow-up of the implementation status of HEC Quality Criteria in all Public/Private Sector Universities / DAIs continued throughout the year. It is pertinent to mention that the implementation status of any criterion by an HEI is validated after the provision of relevant notification/minutes of the meeting of Senate / Syndicate/BoG etc.

Impact
- Because of adoption of HEC policies & guidelines through statutory bodies, the quality parameters for teaching/learning and research are expected to achieve sustainability.

Ranking of Public and Private Sector Pakistani Universities
Higher Education Commission (HEC) has ranked all Private and Public sector universities using QS ranking criteria with some modification in the criteria as per universities feedback. This is the first ever Quality and Research Based ranking of Pakistani universities compiled by HEC. This major milestone achieved in seven months rigorous efforts. HEC will carry out ranking of HEI's every year.

Establishment of Directorate of Distance Education
- The objective of these Directorates is to facilitate private candidates at Graduate and Master Level and to improve the quality of learning as well as to enhance the success ratio in examinations of the private students.
- These Directorates will provide education facilities to the private students through distance education.
- Directorates are being established in the following Universities:
  1. University of the Punjab, Lahore
  2. University of Peshawar, Peshawar
  3. University of Karachi, Karachi
  4. University of Sindh, Jamshoro
5. Bahauddin Zakariya University, Multan

6. Gomal University D. I. Khan

The Project Management Unit is being established at HEC to coordinate with Directorate of Distance Education (DDEs).

**International Liaison**

- Liaison developed with international Networks on Quality assurance.
- Membership earned Asia Pacific Quality Network (APQN) and International Network of Quality Assurance Agencies in Higher Education (INQAAHE).
- Represented HE sector of Pakistan at various international forums of quality assurance.
- Three International Conferences on Assessing Quality in HE has been organized so far.

**Publications**

- QA division has developed ‘Quality Assurance Manual for Higher Education in Pakistan’ which provides detailed instructions and explanations of QA processes like self assessment etc.
- Plagiarism Policy duly approved by the Commission has been published.
- Faculty Appointment Criteria (Booklet)
- Good Practices for QA for Accreditation Councils in Pakistan
- These publications have been circulated among all the HEIs and are available on HEC website.

**Quality Enhancement Cells:**

- During the years 2008-11 Quality Enhancement Cell has been established in 54 public and private universities to strengthen quality assurance mechanism. Based on criteria/standards and feedback proformae provided by HEC, self-assessment has been introduced in 185 additional programmes during the period 2010-11. A total of 1043 programmes are now engaged in identifying the weaknesses and strengths of programmes through self-assessment in 84 public and private HEIs. Progress of each Quality Enhancement Cell (QEC) is being monitored biannually through a scorecard presentation.

**Accreditation Councils**

- Besides the 10 professional councils existing at national level, four HEC established councils are functioning at national level to strengthen the external quality assurance mechanism at programme level. Close collaboration and cooperation between all the Councils and HEC now exists on matters of mutual interest.
- The four Councils dealing with Agriculture, Business, Computing and Teachers Education have their own set of standards and criteria, and are engaged in assigning rating to programmes ranging from W (meeting the major criteria) to Z (seriously deficient in meeting the laid down criteria). Scorecard has been devised to monitor progress of each council biannually.

**Ph.D. Programme Review**

- One of the important achievements of HEC is to standardize the MS / M Phil and Ph.D. Programmes by deriving the minimum criteria for the award of MS / M Phil and Ph.D degrees. The implementation status of the HEC developed minimum criteria two rounds of Ph.D Programme Review were undertaken in 2006-08 and 3rd round has been initiated.

ACCREDITATION & ATTESTATION
The Act / Ordinances of 21 new Universities / Degree Awarding Institutions have been promulgated by the Federal and Provincial Governments.

19 cases for foreign collaboration were received out of which four cases have reached the level of maturity and remaining are under active consideration.

82 fresh proposals for establishment / up-gradation and Foreign Collaboration were received.

To streamline and support institutional processes and operations, HEC has successfully introduced / installed SAP ERP application in its offices.

The HEC has introduced Tenure Track System, which offers a market based competitive salary package to attract and retain intelligenstia in public sector institutions of higher learning. Presently, there are 1,257 tenure track teachers working in different public sector universities.

In addition to recurring funds, releases of development funds under “Subsidy to Scholars under Cultural Exchange Programme” are managed by Finance Planning Division.

### SPORTS AT HEC/UNIVERSITIES

<table>
<thead>
<tr>
<th></th>
<th>2007-08</th>
<th>2011-12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Events at HEC Intervarsity Championships</td>
<td>40</td>
<td>54</td>
</tr>
<tr>
<td>No of participating universities</td>
<td>78</td>
<td>96</td>
</tr>
<tr>
<td>Medals at National Level</td>
<td>37</td>
<td>89</td>
</tr>
</tbody>
</table>

### ICT and Higher Education

Pakistan Education and Research Network (PERN) Expansion & Enhancement:

During the years, a number of universities / institutes and their campuses are brought on to the PERN network in almost all MetroNets and other cities across the country as well. For the purpose, optical fiber cable (OFC) is extended to the universities/ institutes from the nearest PERN PoP, and in some cases other last mile medium, like DRS, wireless bridges, managed capacity are also used.

<table>
<thead>
<tr>
<th>Key Indicators</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of universities</td>
<td>17</td>
<td>5</td>
<td>16</td>
<td>14</td>
</tr>
</tbody>
</table>
Max. bandwidth to a university (Mbps) | 20 | 100 | 240 | 310
---|---|---|---|---
Training to universities’ resources | 8 | 27 | 32 | 37

Connectivity has been established between PERN CRA-PoP at HEC and Holy Family Hospital, Rawalpindi for the purpose of live and interactive sessions/workshops on laparoscopic surgeries through video conference network of HEC. The sessions are then broadcasted to different medical universities/institutes across the country.

**National Video Conference Network**

By supporting the mandate of HEC to develop e-Academia, video conference network has been expanded to 79 sites by establishing the world class purpose built video conference class room setup at each and every public sector university, whereas the footprints now spread over 30 cities.

During the National Exhibition organized by HEC alongside the national conference on “Setting Standards for 21st Century Pakistan” held in May 2011. For the exhibition, the arrangements were done to showcase research and development activities being performed at Jambar Farm House of UVAS, HEJ Karachi, PIEAS Operation Theater, Khairpur University Botanical Farm, Gomal University research laboratory, and KPK University of Engineering & Technology, Peshawar. This was the first time in the history of country that interactive video sessions were conducted directly from the research facilities.

<table>
<thead>
<tr>
<th>Key Indicators</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of universities provided with the facility</td>
<td>15</td>
<td>25</td>
<td>17</td>
<td>04</td>
</tr>
<tr>
<td>% penetration w.r.t. overall setup</td>
<td>42</td>
<td>89</td>
<td>95</td>
<td>100</td>
</tr>
<tr>
<td>Total Events Arranged</td>
<td>475</td>
<td>1022</td>
<td>1028</td>
<td>1163</td>
</tr>
</tbody>
</table>

**Online Reservation System for Degree Attestation**

The Higher Education Commission had launched the Online Degree Attestation Reservation System (DAS) - an online system to facilitate the process of degree attestation and to avoid the big queues and automate the process of the degree attestation reservation back in March 2009. It has been running successfully ever since and has helped in making the Attestation process for the users much easier and swifter.

<table>
<thead>
<tr>
<th>Key Indicators</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total No. of Applications submitted</td>
<td>-</td>
<td>39883</td>
<td>70306</td>
<td>83237</td>
</tr>
<tr>
<td>Total No. of Attestations</td>
<td>-</td>
<td>33483</td>
<td>55723</td>
<td>63272</td>
</tr>
</tbody>
</table>

**Campus Management Solution**

The implementation of Campus Management Solution in the Higher Education Institutes was the requirement not only to streamline the academic processes but also for the reliable, single integrated and high-quality data availability. Implementation of the solution has been completed in the pilot phase universities as per plan. This year focus remained to facilitate end-users by training them to use the system at maximum and reduce working through manual system. Portal access was provided to the students and faculty members to facilitate them through Self Service. Use of Student Financials and
Gradebook module was also targeted this year to automate and streamline these complex academic processes.

<table>
<thead>
<tr>
<th>Key Indicators</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of universities</td>
<td>2</td>
<td>4</td>
<td>2</td>
<td>-</td>
</tr>
<tr>
<td>No. of Users (students) getting services of CMS</td>
<td>3000</td>
<td>20,500</td>
<td>51,000</td>
<td>-</td>
</tr>
<tr>
<td>Functional Training (to faculty members, admin users, students)</td>
<td>580</td>
<td>4650</td>
<td>4585</td>
<td>-</td>
</tr>
<tr>
<td>Technical Training (to Project Team)</td>
<td>29</td>
<td>42</td>
<td>51</td>
<td></td>
</tr>
<tr>
<td>Technical Training (Hardware)</td>
<td>-</td>
<td>20</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-</td>
<td>-</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-</td>
<td>-</td>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>

**HEC Web Portal**

National Higher Education Web Portal of Pakistan is one of the most visited web portals of Pakistan with about 27.0 million hits per month. There are more than 1700 pages in the HEC Site. HEC website has more than 250 different schemes / programmes and more than 70 new schemes have been created in the past years. Portal allows the users to easily find and review the enormous amount of information on higher education sector of Pakistan.

A couple of web applications have been developed to facilitate the users and make these services readily and easily accessible. These services have been focused on the home page to emphasize on them. Communication gap between the students, universities and HEC has been reduced with the introduction of Contact Us web features, Facebook and Twitter site.

Contents on the website are being published by the owners of the content utilizing the content management system. This revamping was done on the latest of Microsoft Technology MOSS. MOSS platform provides ease for administrators and users alike to maintain a smooth running Web based system allowing the users to easily publish their needs on the website without much interference from the web site administrators. The system also allowed users to easily display dynamic data and graphs for showing progress and making it easier for the public to make decisions relating their academic carrier.
The system provides complete workflow from posting of job positions, scrutiny through pre-defined filters, entering tests/interviews scores by the administrator, generating shortlisted candidates’ report and other featured services. NHJP provides a unified platform for Universities and Higher Education Commission to post the jobs available at Universities.