# Universities UK International

# PAKISTAN HIGHER EDUCATION COMMISSION VISION 2025

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**Action:**

For information

**Audience:**

Pro-Vice-Chancellors, Directors International
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# EXECUTIVE SUMMARY

1   On Monday 29 May 2017, the Pakistani Higher Education Commission (HEC) held a consultative conference on the draft Higher Education Commission Vision 2025 document.[1] The document sets out the development ambitions for the sector for 2017 – 2025. The purpose of the conference was to contribute to the creation of an implementation plan for the Higher Education Commission Vision 2025. This note contains a review of the draft policy and includes reference to potential opportunities for collaboration. A detailed summary of the policy is included in the annex.

# HIGHER EDUCATION CONTEXT

2  The Pakistani higher education system was subject to significant neglect in the latter decades of the twentieth century with low levels of public investment.[2] Since the establishment of HEC in 2002 funding has increased in reflection of a new emphasis of the role of universities as drivers of socio-economic development.[3]

## Context

3  The roles, responsibilities and procedures of HEC are set out in a presidential ordinance from 2002.[4] Its functions are wide ranging and include plans to:

- *Formulate policies, guiding principles and priorities for higher education institutions for promotion of socio-economic development of the country;*

- *Prescribe conditions under which institutions, including those that are not part of the state education system may be opened and operated;*

- *Support the development of linkages between institutions and industry as well as national and international organisations that fund research and development with a view to enhancing research;*

- *Determine the equivalence and recognition of degrees, diplomas and certificates awarded by institutions within the country and abroad;*

- *Take measures, including the allocation of funds, for the establishment of fellowships, scholarships, visiting professorships programmes or any other programme, in addition to assistance of similar programmes of institutions and facilitate greater mobility of faculty through national and international contacts;*

- *Promote formal links between institutions in the country to make the most effective use of experience and specialized equipment and promote national and international linkages with respect to knowledge sharing, collaborative research, personnel exchange and cost sharing.*

4  The Higher Education Commission Vision 2025 document reflects this breadth of purpose, placing HEC at the core of a centrally-planned, standardised approach to the development of the higher education sector in Pakistan over the next eight years.

5  Funding for higher education in Pakistan remains low by international standards. Measured in terms of Higher Education Commission Grants, investment in higher education[5] as a percentage of GDP grew from 0.09% in 2001-02 to 0.3% in 2015-16.[6] This is a growth in the total grant from 3.9 billion Pakistani Rupees (PKR) to 87.9 billion PKR.[7] World Bank data[8] provides some basis for comparison. The world average is 1.017% of GDP while the figure for Pakistan is 0.803%.[9] For clarity, the HEC Grant in the year 2012-13 is listed as 0.22% of GDP and consequently cannot be used as a proxy for the World Bank's government expenditure on tertiary education for the years in which that data is missing.

6  HEC's website[10] lists 183 degree-awarding higher education institutions (HEIs) in Pakistan, 108 of which are public, while 75 are private. As elsewhere, there is great variation between and within both parts of the sector and across the entire system. However, 'public HEIs generally offer a wide range of courses and program[me]s, while private HEIs predominantly offer a narrow range of vocationally oriented courses and program[mes] such as business and IT'. This distinction in breadth is perhaps reflected in the performance of Pakistani universities in international rankings. The national system as a whole performs poorly, but those institutions that do feature[11] in rankings are publicly funded.

7 Data on enrolments from a range of sources suggests that there has been a strong growth in student numbers:

- The UNESCO Institute for Statistics report an increase in the gross enrolment ratio from 2.73% in 2003 to 9.927% in 2015.

- HEC reports[12] a growth of approximately 470% from 2001-02 to 2014-15 in the total number of students studying at university on campus and through distance learning.

8 In real terms, most of the growth during the 2001-02 to 2014-15 period, came from students studying on-campus, both public and private. However, the largest percentage increase over the period was in students pursuing distance learning, though there was a small decline in these numbers between 2013-14 and 2014-15. The lack of qualified university teaching staff poses challenges to continued growth in enrolment and improving the quality of the higher education system as a whole. HEC report that 26.86% of full-time faculty had a PhD in 2012-13 though the distribution is uneven across regions and methods of delivery.[13]

# POLICY OVERVIEW

9 The centrally-driven approach of the Higher Education Commission Vision 2025 document is reflective of the Pakistani Government's broader Vision 2025 policy.[14] Indeed, the national policy document makes explicit reference to the role of Chinese and Malaysian Government planning in their respective economic development.[15] Vision 2025 contains seven 'pillars' or priorities each of which are aligned with at least one of the UN's Sustainable Development Goals. These are[16] as follows:

- *People First: Developing social and human capital and empowering women.*

- *Growth: Sustained, indigenous and inclusive growth.*

- *Governance: Democratic governance: institutional reform and modernization of the public sector.*

- *Security: Energy, water and food security.*

- *Entrepreneurship: Private sector and entrepreneurship-led growth.*

- *Knowledge economy: Developing a competitive knowledge economy through value addition.*

- *Connectivity: Modernising transport infrastructure and regional connectivity.*

10 Within the context of the broader national Vision 2025 policy, higher education is identified as a key factor in developing a competitive knowledge economy. Some of the key policies of HEC's Higher Education Vision 2025 are referenced in the national document including a notable increase in spending on higher education from 0.2% of GDP to 1.4% of GDP.

## Key proposals

11 It is important to reiterate that the publicly available HEC Higher Education Vision 2025 has been referred to as a draft and as such is subject to change, both in its themes and the details of its implementation. However, as policies are included in the national Vision 2025 document that have already been subject to considerable research and review it is reasonable to suppose that there shall not be substantial change in the priorities, though one would expect a greater level of detail in any associated plans to 'operationalise' the policy objectives.

12 The priorities of the HEC are included below with a brief explanatory paragraph. Note that there is some inconsistency within the document as to how the various sections are labelled; the list below is taken from the action plan. In the subsequent section the explicitly international dimensions of the various priority areas are identified.

- **Implement three tier integrated system of tertiary education:** The higher education system is to be expanded and stratified. The policy notes an intention

to establish 20 new Tier I universities, 120 new Tier II universities and 150 Tier III institutions, or community colleges. Most this directed growth is expected to come from within the public sector. It is assumed that these shall be created through a combination of expanding existing institutions as well as creating completely new institutions. The objective of the policy is for there to be 300 universities by 2025, 195 of which shall be public and the remaining 105 private. The HEC website currently lists 183 degree awarding higher education institutions. In brief, the roles of the Tier I, II and III institutions are, respectively, to develop research excellence, create employable graduates and deliver vocational training.

- **Research innovation and commercialization:** Considerable emphasis is placed on the role of universities in supporting Pakistan's economic development. To support this the Higher Education Vision 2025 sets out plans for the creation of Offices of Research, Innovation & Commercialisation at all Tier I institutions and 100 Tier II institutions. Additionally, the document calls for the creation of business and technology centres and industrial and technology parks in each of the provinces. Reference is made to opportunities for international collaboration in this area.

- **Enhanced equitable access to higher education:** The document calls for an expansion in participation in higher education. This is in part a reflection of an anticipated increase in demand as well as a conscious desire to increase the number of skilled graduates needed to meet Pakistan's economic ambitions. Included within this is a desire to widen participation and provide greater funding for economically disadvantaged students to complete undergraduate and postgraduate programmes.

- **Excellence in leadership, governance and management:** The appointment of Vice Chancellors is to be led by 'Search Committees' who are to appoint in an apolitical manner based on excellence. A secondary tier of academics, equivalent to Pro-Vice-Chancellor, are to be appointed with responsibility for academic affairs, student support, budget responsibility and

research and institutional development. This leadership reform will be supported by improved monitoring of quality within institutions and the implementation of a higher education leadership programme.

- **Increased quality with highest academic qualifications:** Increase educational attainment amongst full-time academic staff to ensure that 40% have PhDs by 2025. To achieve this, a substantial programme of funding will be implemented to support scholarships for domestic and overseas PhD study. Additional split degree programmes will be developed and offered.

- **Enhanced quality of curricular content for all levels of education offered:** All bachelor programmes will be extended to four years, with a dynamic ongoing review process to refresh and revise curricula. In parallel, a National Qualifications Framework consistent with the Bologna Agreement will be implemented. Assessment staff will be trained to support the review and monitoring of academic programmes.

- **Planned ICT for Education for 2017 – 25:** ICT is expected to enable much of the planned expansion and improvement of the sector. The ICT programmes included in the Vision document focus on increasing capacity. An example includes a scheme to provide free laptops to promising students.

- **Financial management to sustain growth:** The plan requires a significant expansion of government funding for higher education. To complement this funding, ensure institutional sustainability, and enable greater participation, institutional leaders and staff will be instructed in good financial management and directed to identify alternative sources of revenue.

### International dimension

13 HEC's Higher Education Vision 2025 has a strong domestic focus with international engagement principally framed as a means to improve the quality of the domestic system rather than as an end in itself. Nonetheless, considerable international collaboration is suggested. This ranges from established funding commitments for extant schemes to more general references to where such collaboration may be beneficial. Further

information is provided below alongside suggested opportunities for the UK sector to engage with. UUKi will work with HEC and UK representatives in-country to identify any future opportunities and communicate these to the sector.

- **Implement three tier integrated system of tertiary education:** The creation of Tier I research-focused universities shall be accompanied by increased funding for research for those institutions. This expansion in funding shall include the creation of 'mega research grants.' The research areas are not specified but it is expected that there shall be consistency with the national challenge areas.[17] These grants are projected to amount to PKR 2.16 billion (approximately £16.17 million) between 2017 and 2025. Despite their title the amount of funding offered is relatively limited. Nonetheless, in addition to the core research funding of PKR 79.75 billion (approximately £597.08 million) these grants may prove useful for UK universities that are already seeking to engage with institutions in Pakistan.

- **Research innovation and commercialization:** The policy directs fifteen Tier I institutions to collaborate in international research projects. The detail of the policy suggests that these institutions shall be focused on science, technology, engineering and mathematics (STEM) subjects, agriculture, medicine and health. The suggested focus of this international partnership is curriculum development, faculty development, and the creation of globally competitive laboratories.

- **Increased quality with highest academic qualifications:** Significant investment shall be made into funding overseas graduate study. However, the majority of this funding appears to have been allocated to the US. Some of these places will be joint funded through an existing agreement, though it appears that the details of funding for the majority have yet to be worked through. It is proposed that a HEC Office of International Programmes will be set up to arrange scholarships with other countries, though the detail of this is yet to be clarified. Additional scholarships shall be allocated to those academics with

established international connections to pursue postdoctoral studies. Institutions shall also be expected to pursue greater international collaboration through the planned innovation infrastructure

- **Enhanced quality of curricular content for all levels of education offered:** By 2018 all one and two-year Bachelor degrees will have been phased out and replaced by four year programmes, in some cases with a period in industry. This new programme structure follows the 2015 development of the National Qualifications Framework of Pakistan, which is aligned with the Bologna Principles. As the higher education sector in Pakistan[18] becomes aligned with the principles set out in the framework, it is intended to become more comparable and compatible with other higher education systems. Consequently, there may be greater opportunities for international institutions to collaborate in the structure and delivery of courses.

14 In sum, the Higher Education Vision 2025 sets out an ambitious and centrally-led plan for the development of the Pakistani higher education sector that is designed to support the country's national objective to become the next 'Asian Tiger'. This plan includes considerable reference to international collaboration with a significant funding allocation for overseas postgraduate scholarships. Most these appear to have been allocated to the US, however further work is required to fully plan and operationalise these commitments. Work is ongoing with other countries. UUKi shall work with HEC and partners to identify and communicate any discrete opportunities for the UK sector.

# ANNEX ONE:
## Summary of the Higher Education Commission Vision 2025

15 A summary follows of the Higher Education Commission Vision 2025 document which is available on the HEC website.[19] As before, please note, that though the document appears final it has been referred to as a draft[20] for discussion and so it is reasonable to expect further detail or documentation in future, particularly focused on the implementation of the policy.

## 1) Introduction

### Guiding principles

16 The document refers to the improvement of the higher education system in Pakistan since 2002 and sets out the 'guiding principles' by which progress has, and shall continue to be made. In short, these are that a transition is required from an agrarian state to a knowledge economy, globally competitive institutions are essential to this transition, and participation in this should be equitable.

### Development of the plan

17 The Higher Education Vision 2025 supersedes HEC's Higher Education Medium Term Development Framework II (MTDF-II)[21], which covers the period 2011-15. Development of the Vision 2025 document began in the closing stages of that period and is intended to reflect its successes and failures. Additionally, the policy had input from the World Bank's Pakistan: Tertiary Education Support Project (TESP) team. TESP[22] was approved in March 2011 and will close on Friday 30 June 2017. The project has a total cost of $2.015 billion and is intended to, 'improve the conditions of teaching, learning and research for enhanced access, quality and relevance of tertiary education.'[23] Additionally, input was gathered during a consultation session with relevant stakeholders. A subsequent consultation day was held in May 2017 with the draft policy as the basis for discussion. The outcomes of this latter session were not available at the time of writing but are expected to focus on measures to implement the policy.

### Context

#### Vision 2025

18 As noted, the Higher Education Vision 2025 document is part of a broader 'Vision 2025' agenda setting out a path for socio-economic development over the next eight years. In brief, the Vision 2025 plan aims to make Pakistan the next 'Asian tiger'.[24] This will be achieved through 'seven pillars for development': sustained indigenous inclusive growth; energy, food & water security; democratic governance institutional reform and modernisation of public sector; human and social capital; private sector led growth; developing a competitive knowledge economy through value addition; modernise infrastructure and strengthen regional connectivity. Higher education has relevance across most of these 'pillars' but is principally framed in terms of human and social capital.

#### UN Sustainable Development Goals

19 Vision 2025 also seeks to align with the UN's Sustainable Development Goals[25], with commitments to progress in: (1) No Poverty, (4) Quality Education, (5) Gender Equality, (8) Decent Work, (9) Industry, Innovation & Infrastructure and (13) Climate Action.

#### One Belt One Road (OBOR)

20 Notably, but not surprisingly, China's One Belt One Road (OBOR)[26] initiative is explicitly referenced in the policy. OBOR includes collaboration in education[27] as an explicit dimension and consequently it is referenced in the Higher Education Vision 2025 document as one mechanism by which to meet development objectives and provide skilled employment.

### Institutional clarity

21  The document notes the establishment of two provincial Higher Education Commissions in Punjab and Sindh, pointing out the potential for confusion, ambiguity of authority and risk to the objectives of Vision 2025. A review by the Council of Common Interest is underway with the final adjudication on the regulatory status of these provincial bodies is awaited.

### Major challenges

22  At the close of the introductory section of the plan that sets the context for the document is a list of major challenges to HEC to achieve or overcome. These include a new, depoliticised process for recruitment of university leaders; the development of alternative sources of funding; closer connection between academia and industry; professionalisation of administrative staff and an increase in the number of academic staff with advance degrees.

# 2) Key strategic priorities: sustain progress and meet new challenges

### Sustain and consolidate national Higher Education Commission

23  This priority focuses on the ability of the Higher Education Commission as an organisation to deliver the reform required to create a sector that supports the creation of a knowledge economy. Central to the realisation of this is the establishment of a three tier model of higher education composed of, 'Tier I research universities focusing on innovative research output and preparing world class scholars to discover and disseminate useful knowledge; expand the number and capacity of Tier II comprehensive universities and Tier III affiliated colleges to provide equitable access to 25% of the eligible age group, and prepare the productive, upwardly mobile and well prepared middle class who can successfully compete in the world economy; and to strengthen the third tier of collegiate education to prepare constructive and competent scholars, technical and vocational workforce through close cooperation with provincial departments of higher education.'[28]

24  Major programmes to be delivered to achieve this priority include:

- Improved access to digital resources and the establishment of 'smart sub-campuses' of Tier II and Tier III institutions.

- Efficiently improve the capacity of Tier I institutions to conduct research.

- Reform the research grant awarding process to incentivise collaborative research in key disciplines.

- The creation of 100 Offices of Research, Innovation & Commercialisation (ORICs) in Tier I & II institutions with a focus upon agriculture and food security, energy, material science and healthcare.

- Establish five science parks to improve connections between academia and industry.

- 'Develop and fund programmes of international collaboration of research, faculty development, student exchange and wide sharing of knowledge.'[29]

- Implementation of the National Qualifications Framework of Pakistan, developed with reference to the Bologna principles.

### Increase equitable access

25  This calls for an increase in enrolment in higher education in a manner that is equitable in terms of gender and region and helps to deliver a fairer and just society.

26  The document includes projected enrolment figures for the period until 2024-25 based on demographic growth data and current trends. The projection is for an increase in total enrolment numbers of approximately 293% from 1.29 million in 2014-15 to 3.8 million in 2024-25. Distance education is expected to account for nearly 1 million of the increase in while enrolments at on-campus universities are expected to increase by 1.5 million. To accommodate this growth in enrolments the number of universities is also expected to increase from 183 at present to to 300 in 2024-25, 195 of which shall be public and the remaining 105 private. However, the

report notes that as the construction of private institutions is not being incentivised, achieving this projected increase in the number of institutions may be less likely.

27 Major programmes to be delivered to achieve this priority include:

- The expansion of the higher education sector, principally at Tiers II and III to enable the enrolment of 15% of the 17-23 year old population by 2024-25. In parallel, with this expansion there is a need to improve the quality and vocational relevance of the courses offered at these institutions.

- Establish 15 new public 'Science and Technology, ICT, Agriculture, Medicine and allied health professions'[30] institutions. These institutions shall engage internationally and support the priority sectors[31] identified in the 11th Five Year National Development Plan.[32]

- Improve monitoring and evaluation of HEIs through a better staffed Quality Assurance Division (QAD).

- Establish further public and private campus based institutions as well as the number of online programmes.

- Improve the ICT infrastructure and availability and provision of digital materials and services across the sector.

## Excellence in leadership, governance and management

28 This details the need for universities to refocus their mission to better serve the country's socio-economic development and the requirements this imposes on the leaders and management of institutions. This includes better understanding and use of institutional and financial data in the reporting, resourcing and decision-making process.

29 Major programmes to be delivered to achieve this priority include:

- The establishment of a HEC Committee to revise University Acts and design an administrative structure for Tier I & II institutions. It is expected that this will include the delegation of certain powers and responsibilities from the Vice Chancellor to three to four Pro-Vice-Chancellors. These new structures shall be designed to promote interdisciplinarity.

- Revised recruitment processes for Vice Chancellors.

- Improved monitoring and evaluation of teaching programmes and research to ensure quality.

## Increased faculty with highest academic qualification

30 The objective of this priority is to increase the number of full-time university staff with PhDs. In 2012-13 approximately 27% of full-time staff had PhDs. The proportion was higher and lower at public and private institutions, respectively. Additionally, there is significant regional divergence.

31 The ambition is to have 40% of full-time staff as PhD holders by 2024-25. The projections for 2024-25 from 2014-15 are for an increase in the total number of faculty from 37,428 to 95,786 and an increase in PhD holders from 10,032 to 38,314. Domestic and foreign study funding schemes are being developed to support this. Additionally, the Higher Education Commission 'is cultivating partnerships with international universities and Higher Education governing authorities to support split degree, postdoctoral and sabbatical exchange programmes. Scholarships are being arranged with China, European Union countries, Australia, the Americas and Pacific region countries and institutions. HEC will set up an office of International Programmes for this purpose.'[33]

32 'Major programmes' to be delivered to achieve this priority include:

- 10,000 scholars to be sent to the United States as part of the US-Pakistan Knowledge Corridor.[34] As part of this, HEC will work with the Association of Public and Land Grant Universities[35] to 'explore the possibility of developing negotiated arrangements with well reputed public universities for admission of Pakistani universities with relatively reduced tuition rates.'[36]

### Enhanced quality of curricular offerings

33 Vision 2025 aims to standardise and improve the quality of higher education. Measures proposed include replacing all one and two-year Bachelor degree programmes with four year, 136 credit hour degree programmes consistent with the Bologna principles.

34 There will be a strong emphasis on embedding work experience into degree programmes. This will include the creation of 2+2 year degree programmes with integrated internships and work programmes.

35 Quality Enhancement Cells will be created within universities to monitor and report on the quality of instruction and develop and implementation of academic honour codes (it is unclear what the detail of these would include).

36 Additionally, changes are proposed to the current system of curriculum review every three years by National Curriculum Review Committees to create a process that is more dynamic and so better able to respond to changes in knowledge or understanding.

37 No 'major programmes' are proposed under this strategic priority.

### Research, innovation and commercialization

38 Universities will be supported in the development of their research capacity so they can play a constructive role in the establishing Pakistan as a knowledge economy.

39 Activities proposed include:

- 'The existing six internationally ranked research universities will be supported to improve their ranking to be included in the top 200 universities of the world through their scholarly output.'[37]

- Research and development grants for work at TIER I institutions in areas with a tangible economic development dimension.

- Further applied programmes in material science and textile design.

- Research and technology parks to be setup in each of the five provinces with the involvement of universities, business and international organisations.

40 No 'major programmes' are proposed under this strategic priority.

### Financial management and enhanced investment

41 This element of the Higher Education Vision 2025 document simply notes the increased investment the Government will make in the sector and suggests additional sources of funding for the sector as a whole as well as individual institutions.

42 No 'major programmes' are proposed under this strategic priority.

### I.T. embedded higher education

43 The final strategic priority focuses on the necessity of an effective, distributed ICT infrastructure in enabling institutions, scholars and students to realise the other aspects of Vision 2025.

44 Details of a number of planned ICT projects to be delivered by 2025 follows. These include infrastructure, equipment and information management systems. Additionally, a few research and development projects are listed including HEC supported Knowledge and Information Centres and notably a Huawei Research & Development Centre in Islamabad.

# Cost projections for HEC Vision 2025

45 A summary of the cost projections of HEC Vision 2025[38] is included below with available delineated budgets for key initiatives.

| Activity | Cost Projections Per Fiscal Year (in Billion PKR) | | | | | | | | | Total | Cumulative Total |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | FY 16/17 | FY17/18 | FY18/19 | FY19/20 | FY20/21 | FY21/22 | FY22/23 | FY23/24 | FY24/25 | | |
| **Component 1 - Tier I & II universities** | | | | | | | | | | | |
| Tier I - Research universities | 26.1 | 29.55 | 34.46 | 40.23 | 46.74 | 54.05 | 61.69 | 68.12 | 80.46 | 441.4 | 441.4 |
| Tier II - Comprehensive universities | 89.38 | 103.71 | 122.56 | 146.17 | 174.03 | 209.15 | 249.96 | 303.96 | 366.59 | 1765.51 | 1765.51 |
| **Total projected cost** | **115.47** | **133.25** | **157.03** | **186.41** | **220.77** | **263.2** | **311.64** | **372.08** | **447.05** | **2206.9** | **2206.9** |
| **Component 2 - HEC national programmes** | | | | | | | | | | | |
| Promotion of research | 3 | 3.75 | 4.5 | 6 | 7.5 | 9.5 | 12 | 15 | 18.5 | 79.75 | 79.75 |
| Mega research grants | 0 | 0.56 | 0.08 | 0.08 | 0.64 | 0.16 | 0.24 | 0.24 | 0.16 | 2.16 | 81.91 |
| Pakistan education research network | 0.5 | 0.65 | 0.75 | 0.9 | 1.08 | 1.24 | 1.39 | 1.53 | 1.68 | 9.73 | 91.64 |
| National digital library programme | 0.99 | 1.14 | 1.28 | 1.42 | 1.61 | 1.78 | 1.93 | 2.09 | 2.24 | 14.5 | 106.14 |
| Inter-university academic activities | 0.73 | 0.83 | 0.94 | 1.07 | 1.23 | 1.37 | 1.51 | 1.64 | 1.77 | 11.09 | 117.23 |
| Grant to universities to monitor and operate community colleges | 0 | 0.5 | 1.73 | 3.31 | 5.32 | 7.87 | 11.06 | 15.03 | 19.95 | 64.77 | 182 |
| Support to distance education | 0.52 | 0.73 | 1.03 | 1.26 | 1.53 | 1.88 | 2.29 | 2.78 | 3.49 | 15.53 | 197.53 |
| PM tuition fee reimbursement scheme | 2.5 | 3.17 | 3.8 | 4.67 | 5.21 | 6.28 | 7.45 | 8.84 | 9.61 | 51.52 | 249.05 |
| PM student loan programme for higher education | 0 | 0 | 2.32 | 4.88 | 7.86 | 11.45 | 14.49 | 17.52 | 20.02 | 78.55 | 327.6 |
| Financial management and administrative reforms | 0 | 0.24 | 0.43 | 0.67 | 1.07 | 1.61 | 2.32 | 3.15 | 3.93 | 13.41 | 341.01 |
| Offices of Research, Innovation and Commercialisation (ORICs)/ Quality Enhancement Cells (QEC) patents support | 0 | 1.28 | 1.67 | 2.17 | 2.85 | 3.63 | 4.55 | 5.67 | 6.99 | 28.82 | 369.83 |

| Activity | Cost Projections Per Fiscal Year (in Billion PKR) | | | | | | | | | Total | Cumulative Total |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | FY 16/17 | FY17/18 | FY18/19 | FY19/20 | FY20/21 | FY21/22 | FY22/23 | FY23/24 | FY24/25 | | |
| **Component 2 - HEC national programmes (continued)** | | | | | | | | | | | |
| HEC secretariat expenses | 0.6 | 0.8 | 1 | 1.2 | 1.6 | 2 | 2.4 | 2.95 | 3.5 | 16.05 | 385.88 |
| **HEC national programmes total projected cost** | 8.83 | 13.65 | 19.53 | 27.65 | 37.51 | 48.77 | 61.64 | 76.45 | 91.85 | 385.87 | 385.87 |
| **Total projected cost** | **124.3** | **146.9** | **176.55** | **214.05** | **258.28** | **311.97** | **373.29** | **484.54** | **538.9** | **2592.77** | **2592.77** |

# Action Plan of HEC Vision 2017-25

46 A summary of the HEC Vision 2025 action plan[39] is included below. Those elements with an explicit international dimension are italicised. This contains some duplicative material.

| Action plan of HEC Vision 2025 | |
|---|---|
| **Objective** | **Implement three tier integrated system of tertiary education** |
| **Activities** | Establish 20 new Tier I research universities by 2025 with a disciplinary focus in agriculture, arts, business, design, engineering, ICT, mathematics, medicine & health, science, social sciences, and technology |
| | Establish 120 new public and private Tier II universities with a professional focus |
| | Establish 150 Tier III institutions / community colleges with a vocational focus |
| | Dedicated support to the 10 public and private universities that currently place within the world rankings to improve their standing through better research output with corresponding international citations |
| | Increased funding for research & development with two triennial research grants |
| | Tier I universities to establish a Collaborative Research Hub |
| | Development of advanced research laboratories located at 15 public universities but open to all scholars in relevant disciplines |
| **Objective** | **Research innovation and commercialization** |
| **Activities** | Establish Offices of Research, Innovation & Commercialisation at 30 Tier I universities and 100 Tier II universities |
| | Targeted increases in research & development funding |
| | Establish industrial and technology parks established in each of the five provinces |
| | Establish 100 new business and technology centres |
| | Direct 15 Tier I institutions to increase collaboration with international sponsored research projects |
| | Fund the 7th phase of USAID and State Department funded research projects in Science, Technology & Health from 2017 - 2020 |
| | Enhance technology funding through agreements with Korea, China, EU countries and Turkey for collaborative programmes in microelectronics, avionics, manmade materials, computer hardware and auto parts |

| Action plan of HEC Vision 2025 | |
| --- | --- |
| **Objective** | **Enhanced equitable access to higher education** |
| **Activities** | Establish new universities to increase access to higher education |
| | Enrol and graduate 200,000 students in postgraduate programmes |
| | Increase capacity for teacher training programmes |
| | Increase funding for existing tuition fee waiver and laptop distribution schemes |
| | Direct all institutions to raise philanthropic funds to provide scholarships for disadvantaged students |
| | Fund 7,000 scholarships for domestic PhDs during 2017-2021, increasing to 9,000 during 2021 - 2025 |
| | Funding to support increased enrolment in distance education programmes |
| | Increase the number and quality of affiliated colleges |
| | Development and implementation of a new student loan programme |
| | Collection and analysis of enrolment data |
| **Objective** | **Excellence in leadership, governance and management** |
| **Activities** | Establish 'Search Committees' to identify and appoint Vice Chancellors of public universities |
| | Establish a Committee to define revised standards and structures for administrative staff at Tier I and Tier II universities |
| | Implement a standard management structure across the sector with responsible officials for Academic Affairs, Student Advising and Support Services, Budget Planning and Finance, Research & Institutional Development |
| | Strengthen institutional monitoring through Quality Enhancement Cells at all public universities |
| | Revision of the rules of affiliation of Tier III colleges with universities to monitor and promote quality |
| | Implement a higher education leadership programme |
| **Objective** | **Increased quality with highest academic qualifications** |
| **Activities** | Ensure that 40% of academic staff have PhDs |
| | Increase total numbers of academic staff to service increased student enrolment targets |
| | Encourage successful current postgraduates to apply for scholarships for doctoral programmes |
| | Allocate unawarded PhD scholarships |
| | Award scholarships in line with priority subject list developed for the broader Government of Pakistan Vision 2025 document[40] |
| | Prepare 10,000 Pakistani scholars to complete their doctoral studies in ranked US Land Grant universities over the next ten years |
| | Implement scholarships for postgraduate study at Australia, China, European countries, New Zealand, and South Korea |
| | Develop split degree programmes of collaborative study and research with partner universities |
| | Provide 500 scholarships for post-doctoral studies to established scholars with international connections |
| | Subsidise 6000 lecturers to complete domestic PhD programmes during 2017 - 20 |
| | Use planned innovation infrastructure to develop knowledge exchange with partner universities and international donors |
| | Collaborate with provincial Departments of Education to prepare 100,000 school teachers annually and improve the quality of school education |

| Action plan of HEC Vision 2025 | |
|---|---|
| **Objective** | **Enhanced quality of curricular content for all levels of qualification offered** |
| **Activities** | Replace all 1 & 2-year Bachelor degree programmes with 4 year programmes by 2018 |
| | Develop 2+2 courses with strong professional components |
| | Refinement of the National Curriculum Review Committee process to respond more dynamically to changes in subject expertise |
| | Implement National Qualifications Framework consistent with the Bologna Agreement |
| | Expand training in quality assurance for university staff |
| | Institution of Accreditation Councils for new disciplines |
| | Train 150 evaluators to perform programme assessments |
| **Objective** | **Planned ICT for Education for 2017 - 25** |
| **Activities** | Provision of 300,000 internet enabled laptops to well-performing students by 2019 |
| | Provide free WiFi to 94 public universities |
| | Install security equipment at all Tier I universities and 64 Tier II universities |
| | Create 350 smart classrooms |
| | Institutionalise a Learning Management System at 50 new universities |
| | Implement national cloud infrastructure |
| | Upgrade Pakistan Education and Research Network (PERN) telecommunications infrastructure |
| | Implement Higher Education Management Information System (HEMIS) at Tier I universities |
| | Implement EDU Card service to conduct transactions and access services on campuses at 10 Tier I universities per year |
| | Establish a Research & Development Centre with Huawei Technologies in 2017-18 |
| | Support collaboration between academia and industry in the development of high quality electronic devices |
| | Establish an Office of Research, Innovation & Commercialisation Automation and Research Cluster Management System to plan, monitor and evaluate the output and performance of ORICs |
| | Setup five IT academies and testing centres |
| | Pilot a Capacity Planning System at all public and private universities |
| **Objective** | **Financial management to sustain growth** |
| **Activities** | Secure the required financial resources to achieve targets of expansion and quality improvement |
| | Request incremental increases to the revised funding request of 1.4% of GDP for higher education |
| | Direct HE leaders to identify and generate additional sources of institutional revenue |
| | Develop and implement college improvement plans |
| | Introduce a requirement for financial auditing at all universities |
| | Financial training for public university staff |

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40. A complete list is included in the Higher Education Commission Vision 2025 document. The broad sectors or subject areas are as follows: energy; interdisciplinary areas for China-Pakistan Economic Corridor and development; oil & gas; water management & agriculture; environment & climate change; manufacturing & innovation; leadership, project management, teamwork, global market and entrepreneurship and innovation; job creation, technology commercialisation, start-ups, small businesses; strategic defence and manufacturing industry; healthcare, food processing; planning and development. http://www.hec.gov.pk/english/HECAnnouncements/Documents/Announcement/HEC-Vision-2025.pdf