FOREIGN FACULTY HIRING PROGRAM - FFHP

The Brain-Gain Drive of the Higher Education Commission in Pakistan

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ABSTRACT

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This thesis explores the strengths and weaknesses of the Foreign Faculty Hiring Program (FFHP) in Pakistan from the 'participant's perspective'. The purpose of this research was to disclose the prime interest of foreign faculty members in joining the FFHP in order to gain a deeper knowledge and understanding about their experiences during their current tenure. In addition, the aim was to determine how important role FFHP has played so far in reversing the brain-drain into brain-gain. Apart from this, the argument of this study was to reveal the fact that foreign faculty hiring does not appear to represent something *unique*. To support this argument the researcher presented a contextual framework based on Indian Muslim education system during the British rule in the 19th century India and described the pre-partition situation of higher education. Similarly, the post-partition history of higher education in Pakistan was also discussed to highlight the efforts of the Higher Education Commission (HEC) in Pakistan since 2000. The researcher has described the reform and expansion movement of HEC especially in the era of globalization and internationalization. To investigate issues related to this work, the researcher adopted a qualitative case study methodology incorporating some quantitative techniques. The data collection methods used in this research included documents (such as: historical texts, publications, government documents, official reports, online papers, etc.) and web self-administered questionnaire.

The Web-SAQ, consisting of 30 questions, was sent to foreign faculty members who joined the FFHP since 2004 onwards. From a total of 145 recipients, 43 male and female returned the online-questionnaire making an average of 30% response rate. The mean age of the participants, who represented 12 different countries and 5 continents of the world, was 53.20 years. The researcher examined and analyzed the data utilizing the "mixed methods approach" by using two different techniques: (1) basic descriptive statistics through reporting of percentages and mean responses of foreign faculty via SurveyGizmo, and (2) qualitative content analysis of open-ended responses. Data from this research confirms that almost 100% of respondents wanted to contribute in reversing the brain-drain and their overall satisfaction level towards FFHP was high. However, findings also indicate that foreign faculty members have experienced a variety of challenges and problems in terms of university politics and bureaucratic regulatory structure and as such have a great deal to cope with from an emotional point of view. Finally, the study reveals that foreign faculty members are not highly valued in Pakistan by their local counterparts. To address all such issues, the researcher has made some recommendations and well grounded suggestions which may be of interest to general readers as well as Higher Education researchers for further study.

Key words: Higher Education, Foreign Faculty, Internationalization, Brain-Drain/Gain

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LIST OF ABBREVIATIONS AND ACRONYMS

AKU: Aga Khan University
APAN: Asia Pacific Advanced Networks
COMSATS: Commission on Science & Technology for Sustainable Development in South
CHEPS: Center for Higher Education Policy Studies
CIIT: COMSATS Institute of Information Technology
DAIs: Degree Awarding Institutions
DFID: Department for International Development
EC: European Commission
ELTR: English Language Teaching Reforms
Email: Electronic Mail
EM: Erasmus Mundus
FFHP: Foreign Faculty Hiring Program
FIDIPRO: Finland Distinguished Professor Programme
FRCS: Fellowship of the Royal College of Surgeons
FP: Foreign Professor
HE: Higher Education
HEC: Higher Education Commission
HEDDA: Higher Education Development Association
HEEM: European Master in Higher Education
HEG: Higher Education Group
HEIs: Higher Education Institutions
HESC: Higher Education Support Commission
HESS: Higher Education Sub-sector
HRD: Human Resource Development
HSC: Higher Secondary Certificate
GB: Great Britain
GDP: Gross Domestic Product
GER: Gross Enrolment Ratio
GIK: Ghulam Ishaq Khan Institute of Technology
GOP: Government of Pakistan
ICG: International Crisis Group
ICT: Information and Communication Technology
IDRC: International Development Research Center
IMF: International Monetary Fund
IOM: International Organization for Migration
ISESCO: Islamic Educational, Scientific and Cultural Organization
LID: Learning Innovation Division
LUMS: Lahore University of Management Science
MAOC: Muhammadan Anglo Oriental College
MBA: Master of Business Administration
MENA: Middle East and North Africa
MoE: Ministry of Education
MoF: Ministry of Finance
MoI: Ministry of Interior

LIST OF ABBREVIATIONS AND ACRONYMS
(continued)

MPhil: Master of Philosophy
MRCP: Membership of the Royal Colleges of Physicians
MS: Master of Science
MTDF: Medium-Term Development Framework
NAHE: National Academy for Higher Education
NDL: National Digital Library
NTC: National Telecommunication Corporation
OECD: Organization for Economic Cooperation and Development
OPEC: Organization of the Petroleum Exporting Countries
PERN: Pakistan Education and Research Network
PhD: Doctor of Philosophy
PTF: Pakistan Task Force
QAA: Quality Assurance Agency
QAA: Quality Assessment and Accreditation
QAC: Quality Assurance Committee
QEC: Quality Enhancement Cells
QC: Quality Control
R&D: Research and Development
SFFHP: Short-Term Foreign Faculty Hiring Program
SME: Small and Medium Enterprises
STTEP: Short Term Teacher Exchange Program
SPSS: Statistical Package for the Social Sciences
TBG: The Boston Group
TFHE: Task Force on Higher Education
THES: Times Higher Education Supplement
TTS: Tenure Track System
UAE: United Arab Emirates
UGC: University Grants Commission
UK: United Kingdom
UNCTAD: United Nations Conference on Trade and Development
UNESCO: United Nations Educational Scientific and Cultural Organization
UN: United Nations
URL: Uniform Resource Locator, previously Universal Resource Locator
UTA: University of Tampere
WB: World Bank
Web-SAQ: Web Self-Administered Questionnaire
WWW: World Wide Web

*"Ask not what your country can do for you,
but what you can do for your country"*

John F. Kennedy (1917–1963)

1   INTRODUCTION

1.1 Context and Focus of the Study

All across the world, foreign faculty[1] play important roles in nurturing the university teaching and research culture and in creating a learned international community. Historically, within the Indo-Pak subcontinent,[2] the hiring of foreign faculty can be traced back to the 19th century in India (Zuberi *et al*. 2007; Ruswan 1997; Lelyveld 1978) as well as to the mid-20th century in New Zealand (Goldfinch 2004:234). In the present age of globalization, hiring and maintaining a highly qualified foreign faculty is the greatest challenge for any country, which clearly means attracting bright professors, talented scientists, engineers and eminent scholars. These members are, in turn, expected to have a significant positive impact on the entire state of higher education, research, and scientific development of the host country.

Today, many countries (for instance, Japan,[3] Korea[4] and Finland[5]) have adopted new policies and programs regarding hiring both foreign and expatriates as academic staff/faculty from around the world. However, some countries (for instance, Australia, Canada and the USA) have traditionally been open to hiring academics from overseas, while others including France and Germany have some barriers to hiring foreign academic staff. Newer academic systems, including those in the Gulf States and Singapore, hire foreign academics either on a permanent or a contractual basis (Altbach & Teichler 2001:8). This shows that, foreign faculty hiring is a growing globalised trend that ultimately encourages international interaction and academic involvement with local faculty members. Consequently, it helps

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[1] The terminology "foreign faculty" refers to foreign/expatriate professors, associate professors and assistant professors, including but not limited to researchers, scientists and engineers. For the purposes of this research, it refers to those members who are presently working in Pakistan under FFHP project.

[2] While "Indian-subcontinent" is the standard name used in International circles, the name "Indo-Pak subcontinent" has cache in Pakistan.

[3] According to Aoki (2005:[online]) "The percentage of foreign faculty members has increased from 0.97% in 1982 to 3.41% in 2002, which is almost equivalent to the percentage of foreign faculty in the U.S. (3.36%)."

[4] Cyranoski (2002:[online]) states that "The Korean Advanced Institute of Science and Technology (KAIST) in Taejon, for example, has recruited 27 foreign faculty members to either full-time or visiting positions."

[5] Finland, in 2006, has introduced a Distinguished Professor Programme (*FiDiPro*) for top researchers, both foreign and expatriates, in science and technology. Currently, there are 30 *FiDiPro* professors working at Finnish universities and research institutes. For more information, please visit: www.FiDiPro.fi/eng/

higher education institutions as well as other organizations involved in basic research to cooperate, establish, and promote linkages in both developed and developing countries.

In the context of Pakistan, quite a similar approach is reflected in the mandate, policies and programs of the Higher Education Commission (HEC).[6] The mandate of the HEC encompasses all public and private sector universities and degree awarding institutions. At present, there are 124 universities and degree awarding institutions in Pakistan of which 67 are in the public sector. Within these universities some 11,000 local faculty members are working and out of whom only about 3,000 hold PhD degrees and of these only about 600 are active in research (Garib 2008; Jamal 2008). In Pakistan, the need for more Doctorate holding faculty, who could be good research supervisors, is very acute. Therefore, to cope with this critical shortage of qualified PhDs, the HEC has launched a number of short and long-term faculty development programs (see Chapter 3, section 3.4 and 3.9). Within HEC's vast range of activities one key project is Foreign Faculty Hiring Program (FFHP), which occupies center stage. This program is designed to hire foreign nationals/expatriates or people with Pakistani origin holding a PhD degree from abroad, having excellent English communication skills, as well as a distinguished teaching and research record. FFHP was launched in October 2003, under the National Higher Education Policy, and is also claimed to be a *unique program* with a solution to reverse the *brain-drain* into *brain-gain*.

The terms "brain-drain" and "brain-gain" are used to describe the movement and possible loss or gain of academics, from their countries of origin (Altbach & Teichler 2001:15). This phenomenon is also currently referred to as "brain circulation" or "brain exchange" and is a feature of "professional mobility" as well (OECD 2004:84). According to Ozden and Schiff (2006), in 2000, Pakistan was included among the top-30 skilled emigration countries of the world, where the stock of skilled emigrants was 0.222 million. Moreover, the rate of highly-skilled migrants increased by more than 50% from 6.1 in 1990 to 9.2 in 2000 (ISESCO 2006). Such migration of highly-skilled Pakistanis is mainly motivated by low salary and lack of other opportunities in professional careers (see Chapter 3, section 3.8).

Within this perspective, FFHP is perceived as an example of a policy to encourage return migration and to combat the phenomenon of brain-drain. The program has great significance

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[6] For more information, please visit HEC website: www.hec.gov.pk

for the drive to bring back highly educated expatriate Pakistani professors, working in academic and research organizations abroad (Mehdi 2005:7), who would otherwise be unwilling to return to Pakistan. The main goal of this program is to hire annually 300 doctorate holding foreign academics and depute them in accredited public sector institutions that would support the under-supervised university students and boost research as well. The program also intends to equip MS, MPhil and PhD students with quality education in disciplines relevant to the economic and social development of Pakistan. In a nutshell, foreign faculty members are hired to educate and train newly inducted scholars in order to generate a new base of trained educators at par with international standards. So far, 366 foreign faculty members have participated in this program since 2003/04, and were attracted to return to Pakistan from different countries. Besides, about 215 of these foreign professors are currently engaged under the long-term scheme of one to five years (Atta-ur-Rahman 2006a; 2007; MoF 2007-2008:178).

The purpose of this study is to determine the importance of 'Foreign Faculty Hiring Program' (FFHP) in Pakistan, with a special focus on examining the experiences of acting participants in this program. The objectives of the study are three-fold. *Firstly*, to identify what is the prime interest of foreign faculty members in joining FFHP scheme. *Secondly*, to explore the expectations, experiences and problems faced by foreign faculty in Pakistani universities. *Thirdly*, to know how important a role these scholars play in reversing the brain-drain into brain-gain and what their suggestions are regarding the FFHP project. Apart from this, the argument of this study is that foreign faculty hiring 'does not' appear to represent something *unique*, as claimed by the HEC. To support this argument, the researcher presents a contextual framework based on Indian Muslim education system during the British rule in 19th century India (see Chapter 2). This describes the development of Western education and the impact of hiring European faculty at the Muhammadan Anglo Oriental (M.A.O.) College, Aligarh, in 1877, which undoubtedly left a long lasting legacy in the South-Asian subcontinent. Additionally, this study presents a background of higher education and reform trends in Pakistan while exploring the ongoing systematic reform movement and major institutional transformation initiated by the HEC, in order to understand the need for FFHP, which is striving to reduce faculty deficiencies while nurturing a quality teaching/research culture in Pakistan.

1.2 Significance of This Study

Understanding the motivational aspects and interests of foreign faculty members in joining the FFHP and how they feel and think about their environment may provide substantive insight into how important and successful FFHP is for Pakistan. Additionally, the researcher intends to describe the satisfaction level of foreign faculty members, working in the host universities, and also shed light on the importance of the brain-gain initiative taken by the HEC. Thus, the primary reason for doing this study is to gain a deeper knowledge of FFHP and to explore its strength and weaknesses from the "participant's perspective" (McMillan & Schumacher 1993:372; 2001:16; Zainal 2007), with regard to their expectations, experiences and problems faced within the domestic environment. Research reporting of such experiences of foreign faculty members in Pakistani universities is scarce and, as far as the researcher knows, no genuine research can be found on this important aspect. Therefore, the goal of this study is to contribute towards filling this gap as well. The outcome of this study may serve to increase the knowledge and understanding of local and foreign "faculty motivation" and "socialization" (Fairweather 1996:44, 87) within Pakistani higher education context.

Moreover, the intent of this research is to contextualize the European faculty hiring within Indo-Pak subcontinent during the 19th century, and to explore some of its historical perspectives/impacts while explaining the higher education reform trends as well as major institutional transformation and re-orientation process of the Government of Pakistan (GOP), initiated by the HEC since 2000. This information (the researcher believes) will be a valuable contribution to the field of higher education studies. By reporting historical data, presenting documentary evidence, and empirical analysis, as a whole, this study shall make significant impact on those academic professionals interested in gaining an understanding of the change in the culture of higher education in Pakistan, with special reference to the issues related to foreign faculty. Besides, it would inform and explain the context by leading towards improving the future research and practice of FFHP in Pakistan. In this regard, this research is mainly targeted at such audiences as: foreign/expatriate professors, domestic professors, researchers and educationists; higher education students; HEC policy makers; as well as institutional stakeholders, both academic and managerial.

1.3 Research Question

As in any research, the most important step is to define the research question, which should have the "substance and form" (Yin 2003:7).[7] This research, therefore, includes both of these important elements. Research questions can usually be grouped into three main types, 'what' 'why' and 'how' questions (see Creswell 1998:17; Blaikie 2000:60; Yin 2003:9). According to Blaikie (2000:60) 'what' questions are directed towards descriptive answers and 'how' questions are concerned with bringing about change.[8] Besides, '**what**' questions do not require hypothesis to guide the data collection, and they may also not be necessary for '**how**' questions (ibid:164). For this particular study, the basic aim was to analyze and synthesize the expectations and experiences of foreign faculty members while exploring the strength and weaknesses of FFHP from the participant's perspective. The emphasis was also placed on the Pakistani higher education environment and the strategic role of HEC, for alleviating the negative effects of the brain-drain and transforming it into brain-gain, particularly in the era of globalization and internationalization. Within this perspective, in order to carry out the research task, the following question formed the basis of this study:

What are the reasons for foreign faculty members in joining the FFHP in Pakistan and *how* they feel about working in the domestic higher education environment?

1.4 Overview of Methodology

The present study entitled: *Foreign Faculty Hiring Program: The Brain-Gain Drive of the Higher Education Commission in Pakistan* is mainly underpinned by the qualitative paradigm and has taken the form of "case study" (Yin 2003). Given the desire to understand both **'what'** and **'how'** types of research questions, qualitative approach fit well for this study as it allowed the researcher to get an "insider perspective" (Marshall & Rossman 2006). The main reason for using qualitative research is to describe the objectives of this study and also become fully aware of the pros and cons of the FFHP, whilst contextualizing the European faculty hiring during the British rule in the 19th century India. The researcher employed a single qualitative case study method to collect and analyze the data in order to answer the

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[7] *Substance* (e.g. what is my study about?) and *Form* (e.g. am I asking a "who," "what," "where," "why," or "how" question) (Yin 2003:7).
[8] In descriptive research, the questions that need to be answered usually begin with what, when, where or how.

research question. In-depth information about the case data was acquired using multiple modes of data generation, based on 'questionnaire' and 'documentation' that suit the research rationale and objectives, as well as, the chosen methodology and design (Lincoln & Guba 1985; Eisenhardt 1989; McMillan & Schumacher 1993; 2001; Merriam 1998; Couper *et al.* 2001; Barnes 2001; Darlington & Scott 2002; Yin 2003).

It is widely acknowledged that questionnaires are one of the best impersonal observation techniques used for eliciting data (Leedy 1993:187). In this study, a web self-administered questionnaire (Web-SAQ)[9] (or FFHP-Questionnaire) was used consisting of 30 questions. Although most questions were quantitative in nature, but two main qualitative questions allowed exploration of the richer picture. Responses were generated via SurveyGizmo[10] and were reported in terms of percentage and means, using descriptive statistics, which were re-examined and analyzed by the researcher utilizing the "mixed methods approach" (Creswell *et al.* 2004:3). Besides, tables and figures were also produced to facilitate data analysis, presentation and interpretation of Web-SAQ.

The other valuable technique of data collection included documentation. Based on their stability, documents are useful sources of information, which can be invaluable to qualitative researchers (Lincoln & Guba 1985; Hoepfl 1997; Yin 2003). In this study, documents/texts were collected and studied to present a clearer and more in-depth understanding of the historical context, the efforts and reforms of the Higher Education Commission, and the need for FFHP project. Documentary evidence, including credible data (e.g. publications, government documents, official reports, online papers, etc.), were collected by the researcher from academic libraries and various internet sources. The researcher carefully analyzed all the data, gathered during the thesis process, and studied how they are related as well as support each other - to depict the research question - that eventually lead to conclusions and recommendations. A complete description of the research methodology can be found in Chapter 4.

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[9] Self-administered questionnaire is completed with no interviewer involvement. Likewise, in Web-SAQ the respondents read and answer questions via computers and complete the questionnaire individually on the web in places (home or office) with Internet connection. The information is stored on a server through an Internet connection and is used to facilitate the entry of data by respondents (Couper 2001).

[10] For more information, please visit SurveyGizmo: www.surveygizmo.com

1.5 Organization of This Study

This thesis is presented in *six* chapters. The current chapter has provided the introduction of the study, while presenting the context and focus, significance, research question, methodology and organization of the study. The rest is organized as follows.

Chapter 2 describes the development of Western education system and the quest for Modern education during the British rule in 19ᵗʰ century India. The general aim of this part is to support the argument of the study that FFHP does not appear to represent something *unique*. Therefore, this section establishes a contextual background of European faculty hiring at Muhammadan Anglo Oriental (M.A.O.) College in 1877, which would facilitate understanding the major impact of Western education system and the reasons for hiring European faculty in the Subcontinent that eventually led to the creation of Pakistan on 14ᵗʰ August 1947.

Chapter 3 comprises the higher education and reform trends in Pakistan. It starts with the post-partition era and explains the re-orientation and transformation of higher education in Pakistan. Further, it highlights the ongoing genuine reform and expansion movement started by the HEC, since 2002, and thus explains the importance of English, university ranking system, as well as, the role of ICT in Pakistani higher education system in the era of globalization and internationalization. Finally, the chapter present an overview of brain-drain and brain-gain phenomenon in Pakistan and highlight its causes while discussing the current efforts of HEC in order to alleviate the negative effects of the 'brain-drain' and to transform it into 'brain-gain' through faculty development programs like FFHP.

Chapter 4 details the methodological approach and research design, based on qualitative case study, selected for this study. It includes the data collection strategies and explains the analysis procedure as well as the use of web self-administered questionnaire (Web-SAQ) (or FFHP-Questionnaire) and documentation in detail. The chapter finally concludes with the limitations of this research.

Chapter 5 contains two main sections. The first section outlines the presentation of Web-SAQ, while the subsequent section presents the analysis of close and open-ended questions using mixed methods approach (i.e. quantitative and qualitative) that provides the details

related to the three fold objectives of this study. In this chapter the researcher reported and explained the quantitative and qualitative interpretation of the data collected by Web-SAQ while presenting the critical findings.

Chapter 6 provides synthesis of the findings from this case study and functions as conclusion of the thesis in concert with the aims of study. Later, the discussion focuses on the recommendations and suggestions for future research.

Finally, Appendices are included to explain and support concepts, ideas, and findings of this research. The references section contains a completed list of authentic literature, in alphabetical order, used for this study to assist readers in locating specific resources if needed.

2 CONTEXTUALIZING APPROACH

The purpose of this chapter is to describe the development of Western education system and the quest for Modern education during the British rule in Indo-Pak subcontinent in the 19th century. The general aim is to support the argument of this study that Foreign Faculty Hiring Program in Pakistan does not appear to represent something *unique*. Therefore, this section establishes a contextual background of European faculty hiring at M.A.O. College in 1877 that would facilitate understanding the major impact of Western education system and the recruitment of European faculty in the Subcontinent, which eventually led to the creation of Pakistan on 14th August 1947.

2.1 Western Education System in Indo-Pak Subcontinent[11]

The higher education conceptual framework, before the partition of India and Pakistan in 1947, was developed by the British rulers in the 19th century by, among others, Lord Thomas Babington Macaulay (Ahmed 1969) who served as a Law Member of the Governor General's Council from 1834 to 1838. In 1835, Macaulay presented Minute on Education that gave official support to English education in India (Mangalwadi 1997:138; Khalid & Khan 2006:307). According to Mangalwadi (1997:148) the Minute became a part of the 'evidence' advocating English, which later became the cornerstone of British India Educational Policy. In his Minute of 1835, Lord Macaulay, sums up that,

> *"...it is possible to make natives of this country thoroughly good English scholars [and] we must at present do our best to form a class, who may be interpreters between us and the millions we govern; a class of persons Indians in blood and colour, but English in tastes, in opinions, in morals and in intellect. To that class we may leave it to refine the vernacular dialects of the country, to enrich those dialects with terms of science borrowed from the Western nomenclature, and to render them by degrees fit vehicles for conveying knowledge to the great mass of the population"* (Mangalwadi 1997:174-175; Evans 2002:271).

The First Governor General of India, Lord William Bentinck (1828-35) immediately gave his 'entire concurrence' to Macaulay's Minute and passed a Resolution on March 7, 1835, giving effect to the new education policy (Chinnappa 1988:59-62; Evans 2002:272). Lord Bentinck

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[11] While "Indian-subcontinent" is the standard name used in International circles, the name "Indo-Pak subcontinent" has cache in Pakistan.

made English the official language and also restricted Sanskrit, Persian and Arabic education in schools. However, in a significant departure from the Minute, Bentinck disavowed any intention "to abolish any College or School of native learning, while the native population shall appear to be inclined to avail themselves of the advantages which it affords" (Zastoupil & Moir, 1999:195 cited in Evans 2002:272). According to Evans (2002), Bentinck's concessions on these points seem to have been prompted by pressure from influential groups in Calcutta's Muslim and Hindu communities, who, upon hearing news of Macaulay's scheme, submitted petitions to the Governor General of India protesting against the new policy. In the same year, Bentinck also laid foundation of the Calcutta Medical College (Jubilee & Rajeshwari 2007:52) to impart higher education with English as its medium of institution. After William Bentinck, Lord Auckland (1836-42) became Governor General of India. In 1839, Lord Auckland's Minute on education, however, amended Lord Bentinck's Resolution and obtained recognition for the importance of Oriental languages side by side with Occidental learning (D'Souza 1976:105).

For almost 20 years, the British Government gave specific attention on higher education and under these circumstances the policy of the "Educational Magna Charta" of 1854 was formed (Chinnappa 1988:74; Evans 2002:276). This famous "Education Despatch" was drafted by Sir Charles Wood that ushered in the University movement in India (Mangalwadi 1997:230). Wood's Despatch of 1854 reaffirmed that the central objective of British policy in India was the "diffusion of European knowledge" (Evans 2002:276). According to D'Souza (1976:99) the Despatch was undoubtedly of historic importance and was ultimately to achieve great expansion in the field of higher education. In the year 1857, the Universities of Calcutta, Bombay and Madras were founded on the "pattern of London University" (Chinnappa 1988:74) as an institutional transplant from Great Britain. Consequently, within the next few years, Indian education became rapidly westernized. According to Rudolph & Rudolph (1972) in 1857, the total number of Colleges in India was only 27 and the number rose to 75 in 1882. This was due to the rapidly increasing number of students which necessitated the increase in the number of higher education institutions (ibid:3, 174-175). In fact almost all the types of modern educational institutions which exist today in the South-Asian subcontinent were slowly developed during this era.

2.2   Quest for Modern Educational Movement in South Asia

During British rule the Western educational policies made considerable impact on Indian Muslims, especially in the development of Modern education system. After the war of Independence[12] in 1857, Sir Syed Ahmad Khan Bahadur, a British Government civil servant and a well acquainted with Englishmen (Ruswan 1997:4), realized the importance of English and, hence, launched the 'Aligarh Movement'[13] in 1868 - primarily an educational venture (Qureshi 1969) - that changed the future of Indian Muslims. During the year 1869/70, Sir Syed got the opportunity to visit Great Britain and had the chance to become acquainted with Western civilization and to reflect on the condition of Indian Muslims (Ruswan 1997:25). While in England, Sir Syed observed the British system of education and conceived the idea of establishing a Western model institution like "Oxford and Cambridge universities" in Aligarh (Iqbal 1981; 2001) according to the needs of modern time. On his return home, he developed Muhammadan Anglo-Oriental (M.A.O.) High School on the pattern of British boarding schools for the educational empowerment of Muslims. The School, which later became M.A.O. College in 1877, was finally converted into Aligarh Muslim University in 1920 (Qureshi 1969:151; Bhatnagar 1954:i-viii).

The M.A.O. High School, College and Aligarh Muslim University all played a big role in the awareness and building up of Indian nationalism, and became one of the most important landmarks in the educational and social history of Muslim's of South Asia (Hameed 1967:13). Sir Syed championed the cause of modern education, without compromising Islamic values, at a time when all the Indians in general and Indian Muslims in particular considered it a sin to get modern scientific education through English language. His untiring efforts saved the nation from impending ruin and degradation and also created friendly relations between Muslims and Englishmen, while removing mutual prejudice and misunderstanding (Hamid 1967). Consequently, the educational reform of Sir Syed Ahmad Khan was realized in the form of his struggle to improve the economic, social and political status of the people of South Asian region.

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[12] Also called Sepoy Mutiny or Revolt of 1857, was due to the political, social, economic, religious and military grievance of the Hindus and Muslims against the British Imperialism.

[13] The Aligarh movement was composed to educate the new generation of Muslims to learn the English language and Western sciences so that they might secure a substantial share in the administration of the country and design the political future in India.

2.3   European Faculty Hiring and its Impact on the Subcontinent[14]

In an effort to bring the Muslims and the British together, the M.A.O. College at Aligarh started recruiting lecturers and staff from among the English (Ruswan 1997:4, 39) in 1877, and never discriminated on the grounds of religion while appointing them. According to Qureshi (1969:152) the European teaching staff and Principal of the Institution "brought a new outlook on life and introduced efficiency, discipline, and a modern approach to social standards." Sir Syed succeeded in enlisting the services of a number of distinguished British scholars and educationists like Hennery George Impey Siddons *(Founding Principal of College)*, Theodore Beck *(Professor of English/Philosophy and served as Principal of College)*, Theodore Morison *(Professor of English and served as Principal of College)*, Thomas Walker Arnold *(Professor of Philosophy)*, Walter Raleigh *(Professor of English)*, and Harold Cox *(Professor of Mathematics/Political Economy)* who gave their best in building up the College into a first-rate institution (Zuberi *et al*. 2007; Ruswan 1997:40; Lelyveld 1978:213). The purpose of recruiting European academics in many disciplines was to develop critical and creative faculties, and to make Muslims, particularly the nobles and middle classes, aware of the need for Western sciences. To quote Basu (1974:161):

> *"The college popularized Western education among the Muslims and gradually became a nucleus around which al1 efforts at social and political changes among Indian Muslims became centred. Aligarh produced some of the most eminent figures in the field of education, journalism and science. Almost al1 the prominent Muslim political figures in this period--loyalists, communalists, Congressites and Leaguers had emerged from the M.A.O. College. In fact it is difficult to trace the history of any Muslim movement in India after the 1870s without some reference to Aligarh"*

It is clear that, through the quality and standard of higher education, M.A.O. College produced notable personalities whose contributions were remarkable. Quraishi (1989:11) notes that,

> *"… Aligarh claims to have had on its rolls persons who rose to highest positions in public life -- Zakir Husain who rose to be the President of India; Ayub Khan and Ghulam Muhammad who became Presidents of Pakistan; Liaqat Ali Khan and Khwaja Nazimuddin, Prime Ministers of Pakistan;…"*.

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[14] The area encompassing India, Pakistan, and Bangladesh are considered to be a subcontinent of Asia.

This evidence shows that the major impact of Western education system vis-à-vis hiring of European faculty at M.A.O. College began the "social evolution of the peoples of India" (Munir 1995:64). The dynamic educational movement, which was started in 1868, accelerated the Muslim Modernization in India and undoubtedly left a long lasting legacy in the Indo-Pak subcontinent. Eventually, the quest of Sir Syed Ahmad Khan led to the establishment of a separate homeland on 14th August 1947 under the outstanding leadership of Muhammad Ali Jinnah (1876-1948), known as Quaid-i-Azam, the Founding Father of Pakistan.

This notable historical example of the significant impact related to the hiring of several key foreign scholars at M.A.O. College indicates that the need for hiring foreign faculty members in higher education institutions is essential. As Vincenti (2001:42) notes, foreign faculty could be catalysts in the promotion of international or intercultural experiences. However, the approach for hiring good foreign faculty, not any faculty, can be more helpful to introduce quality in teaching, promotion of research, and developing critical and creative faculties. The background information offered in this chapter strengthens the argument of this study that foreign faculty hiring does not appear to represent something *unique*. From this perspective, the context of European faculty hiring in Indo-Pak subcontinent has been presented in order to determine that the ongoing Foreign Faculty Hiring Program in Pakistan is not a new idea, concept or program as claimed by the HEC. The next chapter describes the profile of Higher Education in Pakistan, after gaining Independence in 1947 from the British rule in India, and highlights problems, challenges and the need for change in the age of globalization[15] and internationalization.[16]

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[15] Globalization refers to quantitative and qualitative expansions in trans-border flows of activities and ideas (Wilson 1998:7), which has created the death of distance through fast and efficient Information and Communication Technology (ICT), and also "transforming academia just as radically as it is transforming business" (The Economists 2005:1). To a large extent, "globalization is about markets and suppliers, and the influence of IT" (Douglass 2005:456).

[16] As by definition, internationalization is a process more readily steerable by governments than is globalization (Marginson & Wende 2007b:13). According to Scott (1998:126-127; 1999:2) "internationalization reflects a world-order dominated by nation states." In other words, internationalization emphasizes relationships between and among nations. Knight (2004:9) has defined internationalization of higher education as "the process of integrating an international or intercultural dimension into the teaching, research and service functions of an institution" (cited in Schwietz 2006:iv, 8).

3 HIGHER EDUCATION IN PAKISTAN

This chapter comprises the higher education and reform trends in Pakistan. It starts with the post-partition era and goes on to explain the re-orientation and transformation of higher education in Pakistan, particularly in the emergence of globalization. The aim of this chapter is to highlight the reforms and expansion movement started by the HEC, since the beginning of the new millennium, currently reshaping the structure of higher education system in Pakistan. It also depicts the importance of English-language, university ranking system as well as the introduction of ICT in higher education. Finally, the chapter presents an overview of brain-drain and brain-gain phenomenon in Pakistan. It also examines the causes while discussing the current initiatives and efforts undertaken by the HEC in order to alleviate the negative effects of the brain-drain and to transform it into brain-gain by tapping the human resources of highly qualified foreign national/expatriate Pakistani through FFHP.

3.1 Higher Education Profile during Post-Partition Era

At the time of Independence, in 1947, the newly born Government of Pakistan inherited a conceptualized system of education and administrative setup from the united Indian Government under the British rule. However, during that time the educational profile of the country was extremely low, as participation rate at primary level was 19%, the literacy rate was only 13%[17] and the totally available budget for education was Rs. 30 million (MoE: Educational Development 1993:2). Likewise, the situation of higher education was also precarious as Pakistan inherited only 2 universities in 1947. Among them one was a fully established and functional university (i.e. The University of the Punjab) which was established in 1882 during the British rule in India. This university functioned more or less on the pattern of the Indian Universities of Bombay, Calcutta and Madras, which were founded in 1857 on the pattern of London University (Chinnappa 1988:74). The other institution was the University of Sindh (regarded as the second oldest university in Pakistan) established in 1946 just a year prior to the independence but was not properly functional at the time of

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[17] According to the latest definition, Pakistan recognizes as literate "a person who can read a newspaper, write a simple letter in any *[regional]* language and do simple addition and subtraction". On the basis of this definition, at present, Pakistan has an overall literacy rate of 53%, with a gender gap of 25% (65% for males and 40% for females) i.e. 57 literate women per 100 men (Kazmi 2005:93; Green Papers 2006:34; White Paper-Revised 2007:44).

Independence (Khawaja 1996:139). There were, however, 17 professional colleges (4 Agriculture; 1 Medical; 4 Engineering; 1 Animal Husbandry; 3 Law; 3 Education; and 1 Tibbia or Alternative medicine college) and 42 non-professional colleges (Arts, Science and Commerce) including 5 colleges for women (MoE: Review of Education Policies 1986:18; MoF: Economic Survey 1993-94:189).

Due to this grim situation, attempts to relate the entire educational system upto the needs and aspirations of the country started right after the independence when All Pakistan Educational Conference was held in Karachi from 27th November to 1st December 1947 under the directives of Quaid-i-Azam Muhammad Ali Jinnah - the Founding Father of Pakistan. Laying out the broad contours of Pakistan's education policy, Mr. Jinnah emphasized that,

> *We must bring our education policy and program on the lines suited to the genius of our people, consonant with our history and culture and having regard to the modern conditions and vast development that have taken place all over the world…we have to compete with the world, which is moving very fast in this direction. Also I must emphasize that greater attention should be paid to technical and vocational education* (MoI: Proceedings of Education Conference 1947:5).[18]

In this Conference, Mr. Jinnah stressed the importance of education as an instrument of any nation's socio-economic change. The Conference produced a strong philosophy of modern education and a number of ambitious recommendations indicating the future goals of education in Pakistan. Sadly, the untimely demise of Mr. Jinnah, in September 1948, did not give him the time to guide the newly founded state on to the road to progress and development.

Since then, various governments have made efforts to reorient the educational system in harmonizing with national, social, ideological and economic needs of the country. For this purpose, appointment of different Commissions on Education and Policies were formulated from time to time, although the implementation of these policies was not matched with the many significant recommendations (MoE: PTF 2002:17) made by various governments. Some of the noteworthy bodies in the history of Pakistan educational development are: Educational Conference (1951); Six Year Development Plan (1952); Commission on National Education (1959); Commission on Student Problem and Welfare (1966); National

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[18] For more information on Speeches & Quotes, please visit: www.pakistan.gov.pk/Quaid/

Commission on Manpower and Education (1969); New Education Policy (1970); The Education Policy (1972-80); National Education Policy (1979); National Education Policy (1992); and National Education Policy (1998-2010); (White Paper-Revised 2007:77; Ullah 2005:32; see Appendix A for the chronology of all such efforts).

Alongside these education policies, the then Governments produced eight Five-Year Plans, implemented from 1955 until the second half of 1990s, which, according to The Boston Group (or TBG), "were documents that set unrealistic targets" (2001:17). In this regard, TBG report clearly notes that,

> *Although the Five-Year Plans and the Education Policies…were riddled with serious flaws, even with all their glaring defects, had even a small percentage of policy recommendations been implemented with the requisite earnestness, it would have dramatically improved the situation of higher education in Pakistan.*

Nevertheless, there is also an extensive collection of aborted reform efforts - and all these reforms "were unsuccessful even in meeting their ostensible and proximate goals" (TBG 2001:15) - because they were proposed too hastily, without sufficient research being done, and because they were incompatible (Khalid & Khan 2006:310). This situation drastically affected the educational system as well as the standard of education in the public sector. However, quality education was limited to only a few institutions, many of which were private, profit-making and beyond the reach of all except a very small upper (or elite) class (Ravitch 2006:8). Therefore, reorientation of higher education and change in educational policies were needed so as to end the apartheid system, which threatened to disrupt Pakistani society.

3.2   Efforts for Reorientation of Higher Education: The Need for Change

For over 50 years, the state of education in Pakistan remained woefully unsatisfactory, and Pakistani educational system faced very severe problems that had a direct impact on the development of higher education. According to Hayes (1987) the problems plaguing the educational system of Pakistan are multidimensional like population explosion, lack of resources, non participation of the private sector, scarcity of qualified man power, inconsistency in the policies of various regimes, political instability, inefficient educational management system, wastage of resources, and poor implementation of policies and

programme etc. (cited in Haider 2008:2). Although, with a current population of over 160 million people and per capita GDP of US$925 (DFID 2007), the country is struggling to deal with reconciliation, addressing inequalities and poverty, and building democracy while under pressure to globalize.

For a developing country like Pakistan, the major challenges include contributing positively to economic growth and eradicating poverty; and institutionally the challenges include quality and curriculum reform, brain-drain, proper evaluation system as well as accreditation mechanisms and transferability among universities. Pakistan is still facing these problems and challenges and is, therefore, constantly in a state of change - in reorienting the education system - driven particularly by the impact of accelerating globalization. According to Prof. Dr. Atta-ur-Rahman, Chairman of HEC, the World Bank (WB) in 2003 had assessed that Pakistan was at least 35-40 years behind East Asian countries and 10-15 years behind the South Asian countries in education and therefore it was high time to rectify this anomaly (HEC-Press Release 2006).

In order to improve the quality and promote scientific education in the country, Musharraf's regime started investing heavily in the education sector while adapting to the many changes engendered by globalization. According to the Economic Survey of Pakistan (2006-07:168), over the past four years the Government has increased the budget for higher education more than sevenfold, to about US$449 million, which amounts to 0.5 % of Pakistan's GDP. Additionally, the total spending (recurrent + development) by the HEC grew by more than 344 % in real terms from 2001-2002 to 2005-2006 (World Bank 2006: iii/12; Green Papers 2006:26). In Science and Technology, Pakistan has also increased funding for university research by eight thousand percent (Thulstrup *et al.* 2006:22).

Besides, in cooperation with several European countries (such as: Austria, France, Germany, Italy, Sweden, and The Netherlands) the HEC has launched a US$15 billion Pak-European initiative designed to create nine world-class engineering universities, over the next 10 years, staffed with European faculty and Administrators. Moreover, the HEC will also facilitate the European Commission (EC) in dissemination of its Asia-Link program and will provide all assistance to the EC in helping the development of the education sector. The EC could provide facilities for various areas such as PhD scholarships, Post-Doctoral training and

Establishment of new institutions in Pakistan (Mian 2006:10; Education: News & Events 2006; MoF: Economic Survey 2006-07:168). This development and the massive increase made for higher education had brought about qualitative change in the universities, their faculty and standard of education in Pakistan. These exemplary steps are, therefore, planed to put the house in order to reorient the higher education system and take Pakistan forward in order to become a developed country. Despite all the political, economical, and socio-cultural changes taking place in Pakistan, it can be observed that, the country is witnessing a positive development in the education sector (Kazmi 2005:102) and making a *'transition'* towards knowledge-based economy[19] and market-oriented system with a rapid progression in ICT (Atta-ur-Rahman 2007).

Such *'transition'* is also happening in many other countries as their respective governments have been discussing ways to redefine the role of the state (Maassen & Cloete 2002) and the implementation of "marketisation policies" (Jongbloed 2003) in higher education. According to Gallagher (2000:49), with the shift to market orientation, "the relations of the state with universities are shifting from directive to facilitative policies and mechanisms but with a stronger emphasis on accountability for outcomes." However, any such arrangements can *only* be successful if the traditional steering relationship between state (or "government") authorities and higher education institutions is changed dramatically (Maassen 2003; Enders *et al*. 2003). However, across the OECD member countries, one can observe that a similar shift has taken place in many different fields from government to "free market",[20] and the use of "marketisation"[21] (for instance: competition, the price mechanisms) of various kinds has also become more common. As "changes in systems of higher education tend to follow international trends" (Aarrevaara & Maruyama 2008:7), in this context - when viewed from

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[19] Knowledge-based economy can be defined as an economy which revolves around creating, sharing and using knowledge and information to create wealth and improve the quality of life. In a knowledge-based economy, the university becomes a key element of the innovation system both as human capital provider and seed-bed of new firms (Etzkowitz et. al. 2000:315).

[20] Jongbloed (2003:111) explains that "in a free market, individuals pursue their own interests, try to do as well for themselves as they can and - as argued in Adam Smith's Wealth of Nations - in many cases are led 'as by an invisible hand' to do things that are in the interest of the society as a whole" (see also Teixeira *et al*. 2004). According to Poiesz (2004:310) "A *free market* is associated with advantages and disadvantages for the two principal parties involved: the supply side (manufacturers/ marketers/ distributors) and the demand side (consumers/ buyers/ clients)."

[21] Jongbloed (2003:133) has defined marketisation as "a combination of the government's competition and deregulation policies…*[that encourage the freedom of students and/or HE providers]*…which decide for themselves on the basis of reliable information, freedom to choose and room to move."

the perspective of globalization - Pakistan is also undergoing a transitional period. Its educational system has undergone a major institutional transformation and profound change in ideology, policy and positive reform process. Thus, the reorientation of educational priorities - as part of the process of redressing the legacies of educational apartheid and transforming the systems - has been an imperative of higher education policy discourse since the beginning of the new millennium.

3.3 Move towards Transformation

The importance of higher education in developing (or "low income") countries was brought out in the World Bank-UNESCO (2000) report prepared by the "The Task Force on Higher Education and Society."[22] Higher education experts from 13 countries concluded in their 135-page report *"Higher Education in Developing Countries: Peril and Promise"* that without more and better higher education, developing countries (i.e. home to over 80% of the world's population) will find it increasingly difficult to benefit from the global knowledge-based economy without improving the efficiency and resources for higher education. The Task Force *'Peril and Promise'* put a strong emphasis on higher education and suggested that,

> *Urgent action to expand the quantity and improve the quality of higher education in developing countries should be a top development priority […] each developing country make it a national priority to debate and determine what it can realistically expect its higher education system to deliver* (WB-UNESCO 2000:10).

The report broadly outlines the case for higher education reform, addresses the obstacles and suggests various ways of overcoming them. While *'Peril and Promise'* generally identified the situation of higher education in developing countries, the report prepared by The Boston Group (2001) - an informal think tank of US-based expatriate Pakistani scholars[23] - as its *'Contribution to the Task Force on Improvement of Higher Education in Pakistan'* highlighted the legion of problems in Pakistan's higher education sector. TBG report on *'Higher Education in Pakistan: Towards a Reform Agenda'* relies in considerable measure on the ideas presented in *'Peril and Promise'* and makes a useful contribution by focusing on the situation in Pakistan (Johnstone 2006:82).

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[22] Task Force on Higher Education (TFHE) website: www.TFHE.net
[23] The group gets its name from the fact that its first meetings were in Boston and its current membership is predominantly (although not solely) located around the Boston area in USA.

TBG identified three key areas for reform - Institutional Reform: the challenges of governance; Curricular Reform: the challenges of pedagogy; and Fiscal Reform: the challenges of fiscal solvency (TBG 2001:9-14). It also presented a bulk of recommendations and lists the strategic and tactical steps in order to operationalize these recommendations (ibid:52-56), though some of its recommendations may be contested.[24] Finally, the report advocated the establishment of a Higher Education Support Commission (HESC) - as an independent and transparent statutory body - to mobilize financial, technical, human, and social resources for enhancing the quality of educational institutions, and for facilitating the reform process initiated within these institutions.

After reviewing TBG report, in April 2001, the Federal Cabinet immediately formed a Pakistan Task Force (PTF)[25] with a mandate to analyze the condition of the higher education sector and to suggest necessary changes. In this regard, the objectives assigned to the PTF were, "to review higher education in Pakistan and recommend ways of improving qualities" (MoE: PTF 2002:6). The PTF conducted an extensive field exercise and workshops with all stakeholders to identify the needs and the issues in education service delivery. The PTF in its final report, namely: *'Task Force on The Improvement of Higher Education in Pakistan: Challenges and Opportunities'*, proposed a lot of changes - calling for a complete overhaul of systems and attitudes in the present structure of universities - which ranged from the governing bodies to the overall change in the service structure of teachers. The 78-page report was submitted to the Pakistan Ministry of Education (MoE) in March 2002, and based on the recommendations of the Task Force, which – according to Bloom (2002:9) relied on an "entrepreneurial model" – persuaded the President Pervez Musharraf to initiate a process of reforms in the higher education system.[26] Finally, this led to the establishment of Higher Education Commission (or HEC) in September 2002, which "has an extremely wide range of functions and its chair has ministerial status" (Fielden 2008:15).[27] Since then, Pakistan has

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[24] The TBG report has met with criticism from Pakistani academics because, according to them, it has not increased the autonomy of the universities nor has it given an increased role to faculty members in running universities (Rahman 2002).

[25] Task Force on Improvement of Higher Education in Pakistan: www.tfhe.net/resources/pakistan.htm

[26] In line with the recommendations of the Task Force (TBG 2001:11) the Government decided to replace the University Grants Commission (UGC) with a new Commission for Higher Education in Pakistan.

[27] HEC is located within the Ministry of Education and its activities include functions such as the management of overseas staff exchanges and research partnerships, training of academic staff in pedagogy, management of a national ICT network and a national Virtual Library (c.f. Fielden 2008:15).

witnessed the transformation of its higher education from a highly selective, elitist system to a more accessible, multi-purpose mass education system with a strong quality control mechanism in place. All the ongoing policies of educational reform and decisions of HEC have significantly transformed in ways that make them more harmonized to the realities and requirements of globalization.

3.4 Reform and Expansion of Higher Education

Pakistan was one of the first countries, in the developing world, to support the Task Force recommendations and considered how it could be applied to the local context. According to D. Bruce Johnstone, many of the recent (i.e., 2002-2005) elements of higher educational reform in Pakistan were contained in the influential Task Force Report (2002) (Johnstone 2006:82). Since its inception in 2002, as a fully autonomous and powerful body, the HEC has successfully launched an "unprecedented number of systematic reforms directly aimed at the worst and most immediate issues plaguing the higher education sub-sector (HESS), or, more exactly, universities" (WB 2006: ii/9). These reforms can be classified under the following categories:

- *Quality Assurance, with an emphasis on human resource development (e.g., expansion of the indigenous and foreign PhD programs), introduction of a new service structure for faculty members (tenure track system), definition of criteria for establishing HEIs, standardization of the four-year undergraduate, MPhil, and PhD programs, computerization of universities, and creation of the digital library;*
- *Equity, with a substantial scholarship program and support to institutions located in less-developed areas;*
- *Relevance, with a focus on engineering, science, and technology programs;*
- *Research, with the research grant program, the fellowship program, and the university linkage program; and*
- *Resource Allocation (funding formula).*

In order to expand the quantity and improve the quality of higher education system, HEC also developed a Medium-Term Development Framework (MTDF) for 2005-2010 - a systematic process of implementation of the five-year agenda - to respond to the growing demand of the 21st century in the wake of globalization. In this regard, HEC reform agenda identified the following key areas for improvement: (i) Faculty Development, (ii) Improving Access, (iii) Promoting Excellence in Learning and Research, and (iv) Ensuring Relevance to the

Economy. For each of these four core strategic aims/targets, the MTDF defines clear objectives and lists relevant programs (or physical targets) to achieve them, accompanied by appropriate indicators (see Appendix B). Likewise, these strategic aims/targets are also supported by well-integrated three cross-cutting themes: (i) Developing Leadership, Governance and Management (ii) Enhancing Quality: Quality Assessment and Accreditation, and (iii) Physical and Technological Infrastructure Development (HEC-Achievement 2004-2006; HEC-MTDF 2005-10:7; WB 2006:8; Atta-ur-Rahman 2007).

With regard to student access in higher education, quantity of enrollment is Pakistan's weak spot. In the past, little attention has been paid to address the issue that higher education success largely depends on students entering higher education institutions. Until 2001, the higher education enrollments in Pakistan represented a very low 2.6% GER, of students aged between 18 to 23 years, which was although high across MENA[28] countries (Perkinson 2006:4). Unfortunately, the country was ranked as lowest in the world, in terms of access to higher education, as compared to 10% in India and 68% in South Korea (HEC-MTDF 2005-10:25). However, since the establishment of HEC, the gross enrollment ratio has increased to 2.9% in 2005 and 3.8% in 2007 respectively (MoF: Economic Survey 2004-05:144; 2005-06:168; 2006-07:168).

Despite this progress, the requirements of the knowledge-society[29] - all over the world - clearly point to the need for a much higher GER (about 40-50%) in higher education from the current level of 3.8%. In this regard, HEC has shifted its attention towards improving access and has set a target to "double enrolment in higher education over the next five years by increasing the capacity of the existing higher education institutions and also establishing new ones" (MoF: Economic Survey 2005-06:168; ICG Asia Report 2004:7), whilst bringing about significant improvements in the overall quality of education.

In recent past, the country has welcomed more innovative approaches to mass education initiatives and has also witnessed a spectacular growth and expansion in the number of

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[28] Middle East and North Africa (for more information visit: www.worldbank.org/mena)
[29] "Knowledge-society" is a society in which environmental conditions change and related strategies become outdated at an ever increasing pace (Krücken 2003:335). However, in the context of globalization and emergence of "knowledge economies", the "knowledge-society" becomes the preferred way of a state to refer to itself, in order not to reduce itself into mere economy (Nokkala 2005:6).

chartered universities and degree awarding institutions (DAIs) both in public and private sector (see Appendix C). It can be noted that there is a significant increase of 35 universities during the period 2001-02 to 2004-05 including 13 new public and 22 new private universities. At present, there are a total of 124 universities/DAI's in the country - 67 in the public sector and 57 in the private sector - as shown in Figure 1.

Region	Universites	Public	Private
AJK	3	1	2
Balochistan	7	5	2
Islamabad	17	14	3
Northern Areas	1	1	
NWFP	22	13	9
Punjab	36	20	16
Sindh	38	13	25
Total	124	67	57

Figure 1 Region Wise List of Public and Private Chartered Universities/DAI's in Pakistan.[30]

Within these universities some 11,000 faculty members are working, about 3,000 of which hold PhD degrees, and of these only about 600 are active in research (Garib 2008; Jamal 2008). This is due to the fact that universities in Pakistan have traditionally been conceptualized as teaching institutions, with research occupying a very subordinate role. Unfortunately, Pakistan produces about 300 PhDs per year while India, in 2000, "produced 11,000 PhDs of which 5,300 were in science and engineering" (Parikh 2003:18; Daily Times 2006).[31] According to the Chairman of HEC, Pakistan needs to have at least 300-400 PhD level faculty members in each university and 50-100 PhD level researchers in each research institute, before it can be regarded as a "genuine university" (Atta-ur-Rahman 2006c:35). He further mentioned that, the advanced countries have 2500-3000 scientists/engineers per million population, whereas Pakistan has only about 120 scientists/engineers per million population engaged in Research and Development (R&D). Therefore, Pakistan needs to

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[30] Source HEC: www.hec.gov.pk/main/ourinstitutes.htm
[31] For instance, Finland awarded 1,400 PhD degrees in 2000. The corresponding figures were 1,156 PhDs in 2000 and 490 PhDs in 1990 (Aarrevaara & Hölttä 2007:200).

target a similar per million population figure (a total of 500,000 PhD level scientists by 2025) in order to participate in a knowledge economy. To promote R&D activities, the HEC have launched massive scholarship programs and have also awarded 5,837 (indigenous and foreign)[32] PhD scholarships over the past four years (MoF: Economic Survey 2007-08:179). About 2,600 scholars have already been sent to top world universities (for example in USA, Europe, and China) and 69 scholars have proceeded abroad under Cultural Exchange Programme in year 2007-08. Thus, the government is targeting 1500 PhDs every year by 2009-2010 (Education: News & Events August 2006) in order to create a force of researchers needed for promoting excellence in learning and research that could improve the future quality of students, faculty and institutions.

All these initiatives indicate that, higher education in Pakistan has only recently received more ambitious emphasis than ever before and, over the years of reform, has also gained more certain directions and objectives targeted towards training and development of faculty members in different areas. As all development starts with human development, recent researches revealed that investment in faculty development (for example; pedagogical methods, technology-based teaching tools and basic research skills) improves the performance of student as well (see Trigwell *et al.* 1999; Kember 2000; Mann 2001). In this regard, HEC has also taken an important task of professional development on its agenda through the establishment of 'National Academy for Higher Education' (NAHE) and 'English Language Teaching Reforms' (ELTR). This is a major effort by HEC, under its 'Learning Innovation Division' that was established in 2003,[33] to develop comprehensive teaching-learning material according to international standards in order to facilitate and professionally empower the local faculty.

In short, the realization of the Government, regarding the importance of higher education, has ultimately begun the reform process and "these positive reforms already have benefited the universities" (WB 2006 ii/10) in creating a viable culture of scholarly inquiry. HEC has brought a revolutionary change through helping universities to nurture the teaching and research culture by fostering a learned international community. On the whole, the massive investment in higher education is the strategy adopted by the HEC, which could enable

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[32] Indigenous and Foreign PhD programs: www.hec.gov.pk/HRD/PhD_Programs.htm
[33] Learning Innovation (LI) Division: www.hec.gov.pk/QualityAssurance/Learning Innovation/introduction.htm

Pakistan to meet the future demands of the global knowledge-economy, while responding better to the contemporary challenges posed by globalization.

3.5 English in the Era of Globalization

English is a globally used language and often associated with globalization, both as a cause and a product. In the context of Pakistan, English - being an international language - is considered essential for competition in a globalized world order whereas Urdu - the national language that connects people all across Pakistan - is regarded as a symbol of social cohesion and national integration. Although, Pakistan is a multilingual country with 6 major and over 59 minor languages (Rahman 2003:1) but English is recognized as the official working language, also used in the Constitution, and extensively spoken in public sphere, business and academic circles. Table 1 illustrates the major languages spoken in Pakistan including the national language (Urdu), though only 7.57% of the population uses it.

Languages	Percentage of speakers
Punjabi	44.15
Pashto	15.42
Sindhi	14.10
Siraiki	10.53
Urdu	7.57
Balochi	3.57
Others	4.66

Table 1 Major Languages of Pakistan [34]

It is a widely acknowledged that systems of higher education are greatly influenced by the countries' historical past, culture, nation-building efforts, and global trends. (UNESCO 2006:2; Aarrevaara & Maruyama 2008:7). As discussed earlier, Pakistan's education system was very much influenced by the colonial heritage, which was built on the tradition of the British system from the 19th century, had turned into a highly "fragmented and segmented" system (Hussain 2005:2 see Appendix D). This created a division between the so-called English / Urdu Medium (or Madrassah) vernacular institution, which has expanded rapidly, and led to the operation of two different systems of education within the country (ICG Asia Report 2004:13; Khalid & Khan 2006:312). As such, English has acquired additional value

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[34] Source: Rahman (2003:1)

because it is widely used in private English schools, colleges and higher education institutions. According to Rahman (2003:7),

> *"Globalization will increase the power of English because it will open up more jobs for those who know it. These jobs will be controlled by multinationals, which are dominated by the U.S.A. They are also controlled by the international bureaucracy—United Nations, World Bank, IMF, donor agencies etc.—which have started operating increasingly in 'English'. This will increase the demand for English schooling, which will make parents invest in English at the cost of their own languages."*

This shows that the impact of globalization on higher education has also increased the pressure of English on all other language and Pakistan is no exception. The ICT boom has further strengthened the position of English, and hence without a functional mastery of the English language, Pakistan cannot even enter the process of globalization. Philip G. Altbach has rightly pointed out that "the role of English affects higher education policy and the work of individual students and scholars…English-language products of all kinds dominate the international academic marketplace" (Altbach 2005:67; see Altbach & Knight 2006). Another example that emphasizes on the importance of English is mentioned in the report of UNESCO (2002:47) on curriculum changes in the Asia Pacific region, which states that "facing the challenges of globalization trends, curriculum of countries in the region have paid special attention to foreign languages, first and foremost it is English, then information technology, and communicative and cooperative skills in life." Today, the success of Economic growth is accelerated in those developing economies where English is functionally understood and widely used. In this respect, the pressures of globalization have made it mandatory for the HEC to ensure that curriculum of public higher education institutions become more competitive (WB 2006) and at par with their global counterparts. Therefore, to align Pakistan in the global higher education market, HEC is effectively performing revision of curriculum in collaboration with various universities within and outside Pakistan in order to "update the curriculum to meet national and international standards" (ibid:31).

3.6 The Role of ICT in Higher Education

The emerging trend of Information and Communication Technology (ICT), recently termed as "moving education, not learners" (Wende 2002:8), is also a result of the rapidly increasing demand for higher education. This is indeed one of the driving forces behind the process of

renewal and reforms in higher education system of Pakistan. To meet the challenges of globalization offered by Information age, HEC is determined to recognize and exploit the opportunities created in the new knowledge-society (HEC-Annual Report 2005-2006:38). In 2002, Pakistan's first Virtual University, the proverbial 'baby' of the higher education family - completely based on modern ICT - was established by the Government with over 100 'virtual campuses' in more than 60 cities of the country. The student strength of Virtual University stands at over 14,000 and, to provide national/international access, the university operates its own four free-to-air satellite channels (Malik 2007).

Moreover, the HEC has launched 'Pakistan Education and Research Network' (PERN)[35] in 2002, which is part of the overall vision and amongst the objectives of 'IT Action Plan' of the Government of Pakistan. PERN, a fiber based intranet, was established in line with the global movement to promote open access to scientific literature. It connects all the public and private universities and research institutes through high-speed Internet Bandwidth. It also serves as an accessible portal web-site for Pakistani universities and provides alternative ways (such as distance learning via Internet, radio, and television) to deliver higher education and remote research partnerships (HEC-Annual Report 2002-2003:29). In this regard, universities and campuses in remote areas have also been provided satellite based internet to support the delivery of ICT services. PERN has also collaborated with international research networks like 'Asia Pacific Advanced Networks' (APAN)[36] to link the national academic with researchers around the world. Currently 59 universities have been interconnected through the 'National Telecommunication Corporation' (NTC), and further 59 campuses will be interconnected within a year, to form the only research and education network of Pakistan.

Furthermore, in February 2003, a 'National Digital Library'[37] Program was initiated, which is now the "cornerstone" of HEC's ICT strategy (Said 2006:1). Under this program, over 23,000 leading research journals, covering approximately 75% of the world's peer-reviewed scientific journals, have been made available online to universities and R&D organizations across the country (Annual Plan 2007-08:157), with access to over 45,000 e-Books. Due to the online facility of 'One e-Contact Platform', the research output originating from Pakistan

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[35] Pakistan Education and Research Network (PERN): www.PERN.edu.pk
[36] Asia Pacific Advanced Networks (APAN): www.apan.net
[37] HEC-National Digital Library: www.DigitalLibrary.edu.pk

has been astounding. Figure 2 presents a comparison between 5 years prior to HEC (1997-2001) and 5 years after HEC (2002-2007) performance, which reveals a true picture of the impact of HEC on the research activity in Pakistan.
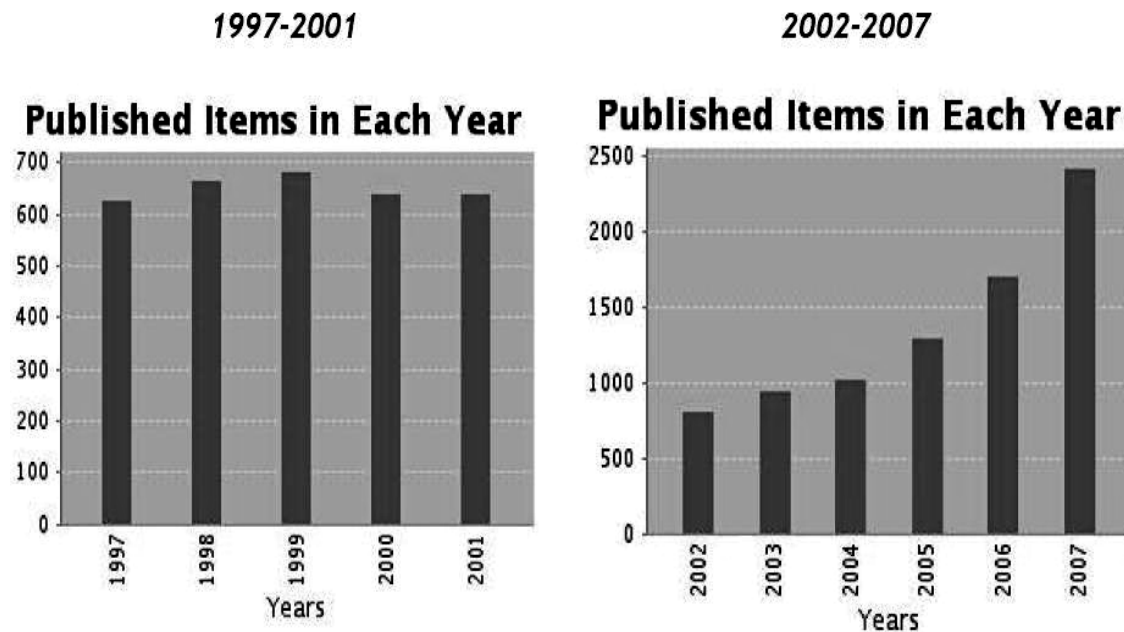
Figure 2 Comparisons between Pre-HEC and Post-HEC Impact on Research Activity [38]

According to HEC data, a total of 3,260 articles were published from 1997-2001 whereas during the five year period of 2002-2007 the numbers went to 8,224 articles, representing a 152% increase, since the HEC started to revamp the education system in Pakistan. Thus, within the framework of MTDF 2005-10 strategies, HEC has seriously focused on the development of an information strategy (to connect Pakistani universities with foreign universities) and has devoted to networking, computerization, and digitalization (World Bank 2006:10) throughout the university system in order to boost the quality of teaching and enhance research facilities.

3.7 University Ranking System in Pakistan

Ranking of universities and degree programs has a strong signaling power that plays a persuasive role in prospective students' and faculty choice and in stimulating competition among higher education institutions across national borders. Within national systems,

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[38] Source: Research Performance 2005-2007, HEC-National Digital Library: www.DigitalLibrary.edu.pk

according to Marginson & Wende (2007a:309), "university ranking[39] serve as a symbol of national achievement and prestige and as engines of economic growth in a global knowledge-economy." In Pakistan, the university ranking system was introduced in May 2006, which was arranged in a single *"league table"*,[40] in order to assess the national institutions with a global perspective. The methodology adopted in determining the university rankings was developed by the Quality Assurance Committee (QAC) of the HEC[41] through a consultative process in which various leading 'international ranking practices and systems' were analyzed (see Usher & Savino 2006; Marginson & Wende 2007a; Salmi & Saroyan 2007). As a result, the following ranking system was formed on the basis of five key issues with relative weightages for each category: Students (17%), Facilities (15%), Finances (15%), Faculty (27%), and Research (26%). Within this ranking system, each category (according to the groups and subgroups) is calculated and rated with a different score from the maximum score of 100 marks (see Appendix E). Salmi & Saroyan (2007:2) state that, the five criteria are similar to ranking indicators in many other nations (for instance Germany) which can be used effectively to monitor and enhance the quality of higher education institutions in Pakistan. In 2006, HEC also constituted a Board to examine the criteria as well as to publish the university ranking/rating list in major newspapers of Pakistan (HEC-Annual Report 2005-2006:53) in order to feed public appetites for data on institutional quality status.

The HEC, under the ranking system, has also linked university performance with funding to enforce quality standards for M.Phil and PhD candidacy by establishing a flow chart with minimum criteria (see Appendix F) and has set a new quality principle for hiring faculty as well. According to HEC's Press Releases, "those *public* sector universities of Pakistan which fail to follow HEC quality criteria in appointments and promotions of faculty members will face suspension of their development grants and reduction in their recurring grants" (Educational News 2006). At present, the ranking system includes only public sector universities, which are categorized in the following six main categories: (1) Agriculture/Veterinary; (2) Art/Design; (3) Business/I.T.; (4) Engineering; (5) General; and

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[39] "University rankings are lists of certain groupings of institutions (usually, but not always, within a single national jurisdiction), comparatively ranked according to a common set of indicators in descending order" (Usher & Savino 2006:5).

[40] "League tables are designed specifically as a comparative measure, pitting institutions against each other" (Usher & Savino 2006:5).

[41] To enhance the quality of education, HEC has established a Quality Assurance Agency (QAA) to regulate and facilitate the Quality Enhancement Cells (QECs) in public/private sector universities (Ghumman 2006).

(6) Health Sciences.[42] Within the 'General' category list Quaid-i-Azam University topped with 58.16 score, University of the Punjab stood at number two with 45.92 points, and University of Karachi came in third place with 42.01 points. These ratings were based on a three-year evaluation from 2001 to 2004 and were compiled in 2005-06. However, it does not include universities that were awarded a charter after 2001. "Despite the general outcry against the publication of the rankings" results, Salmi & Saroyan (2007:2) remark that, "this experience has forced the universities to take data collection much more seriously."

Consequently, for the first time in the history of Pakistan, three public sector universities met international standards and have been ranked among the top 600 universities of the world (HEC-News & Views 2007:11). According to the Times Higher Education Supplement (THES), the National University of Science and Technology is ranked at 470, University of Karachi at 560 and Quaid-i-Azam University at 564 positions respectively in top 1000 universities of the world (Daily Times 2007). This is a clear example that the landscape of higher education in Pakistan is rapidly changing as universities are trying hard to become international players. The introduction of the university ranking system has finally enabled the country to improve the standards of higher education institutions and reach out for excellence in teaching and research. Thus, the intensive efforts of HEC are becoming visible, and it can be expected that after 10-15 years of sustained efforts and support to the higher education sector, Pakistani universities will be ranked in the list of top 100.

3.8   Brain-Drain in Pakistan and the Role of HEC

The forces of globalization have increased the possibilities for the "movement of scholars" (Teferra 2000:62) from one country to another in terms of "professional mobility" (OECD 2004:84).[43] The feature of this term, generically used to describe the flow of highly educated/talented manpower, is widely known as "brain-circulation" or "brain-exchange",

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[42] For details on ranking of universities, please visit: www.hec.gov.pk/QualityAssurance/Ranking_lists.htm

[43] The "brain-drain/gain" phenomenon is also currently referred to as "brain circulation" or "brain exchange" and is a feature of *"professional mobility"* as well (OECD 2004:84). In the academic literature there are various concepts of "professional mobility", for example "brain exchange" implies a two-way flow of expertise between a sending country and a receiving country. Yet, when the net flow is heavily biased in one direction, the term "brain gain" or "brain drain" is used. A further term "brain waste" describes the waste of skills that occurs when highly skilled workers migrate into forms of employment not requiring the application of the skills and experience applied in the former job. In turn, "brain circulation" refers to the cycle of moving abroad to study, then taking a job abroad, and later returning home (Salt 1997; Johnson & Regets 1998, cited in Solimano & Pollack 2004:7).

which is increasing rapidly on a global scale. However, in weaker systems global brain-circulation or brain-exchange becomes a brain-drain, "transferring long-term academic capacity *[from less developed part of the world]* to the strong nations" (Marginson & Wende 2007b:18). This brain-drain phenomenon harms the economy of weak nations, as the receiving country always reaps the benefits of the education and training provided by the sending country. In the case of Pakistan, for the last five decades, the constant migration of professional/skilled workers (i.e. professors, researchers, scholars, engineers, physicians) has been a serious problem and a matter of great concern. Unfortunately, particular attention was not given by previous governments to this daunting issue, and hence the case for any policy response to the brain-drain was never considered to be fully made until recently.

The history of brain-drain, in Pakistan, started in the 1950s and 1960s, due to political upheaval, when young men of working age began to migrate in large numbers to the UK (Gazdar 2003). Then, in the 1970s, emigration to the Persian Gulf region (i.e. Saudi Arabia, Kuwait, UAE, Iran, Iraq, Qatar, Bahrain, and Oman) started rapidly, and in the 1980s it was estimated that as many as 2 million Pakistanis (skilled and unskilled) had immigrated to the oil-rich region due to the OPEC-induced oil crises/economic boom (Gazdar 2003; Siddique 2007). According to Gazdar (2003:9) since the late 1980s and early 1990s, under conditions of political and social repression in Pakistan, "there have been new waves of migration by young men to the EU and North America" and other developed East Asian countries (such as Japan and South Korea). Similarly, during the 1990s, many other developing countries also faced a continuous loss of their best human resources to advanced countries due to the skilled emigration of talented youth causing brain-drain, which had serious constraint on the future economic progress of Third World nations (see Kapur & McHale 2005; Saxenian 2005).

In Pakistan, the migration rate increased by more than 50% from 6.1 in 1990 to 9.2 in 2000 (ISESCO 2006), and it was estimated that at least 2 to 3 million people of Pakistani origin are residing in developed countries (Gazdar 2003). As such, in 2000, Pakistan was included among the top-30 skilled emigration countries of the world (Ozden & Schiff 2006). The causes of skilled migration are not very different from other OIC member countries. According to UNESCO (1987:9) report, "Pakistani study on brain-drain gives an idea of the dimension of the income differences…highly qualified Pakistani earns about ten times as

much abroad as in their home country." Besides economic factors and low income, one of the major causes of brain-drain, according to Nadeem & Ashfaq (2004), is the growing frustration among youth and the non-availability of opportunities in the existing social setup.

The situation of Pakistan has been described by Phillip Bonosky (a contributing editor of Political Affairs) who writes in his book "Afghanistan-Washington's Secret War"

> ***Pakistan seems to have nothing but problems***. *Endemic poverty, which was Great Britain's imperial gift to the colonial world—a poverty on which the sun never sets—has driven hundreds of thousands of skilled and semi-skilled workers (badly needed in Pakistan itself) abroad in search for jobs. **Hardly any country has suffered more from the 'brain drain' than has Pakistan**. Nearly 3,000 (annually) graduates of Pakistan's medical colleges are jobless; most go abroad…The educated see their future not in their home country but in any country but their own* (Bonosky 2001:193).

This shows a gloomy picture that people from all skill levels are losing or have completely lost their faith in the economic future of the country, and badly desire to migrate and settle abroad in search of prosperity. However, the scenario has started to change as, according to Naseemullah (2005:3), "Pakistan is at present fairly cushioned against the effects of the significant brain-drain of the past." This is due to strategic initiatives of the HEC, which has launched a number of HRD, institutional strengthening and PhD scholarship programs, as mentioned earlier, to attract competent scholars, experts and teachers/professors. This will, ultimately, provide the core element of quality human resources so essential for university education in Pakistan. In parallel with the development of higher education sector, HEC has also taken major steps to move the country toward a path of *'entrepreneurial development'* through infrastructure building in complementary areas in order to create jobs and prevent the brain-drain. Some of the key measures taken recently include: "SME Organizations, IT Parks, Technology Township, Incubators, and National Business Plan Competition" (Mian 2006:10). It is clear that the growth and changes in higher education are staggering, and Pakistan is seriously exploring issues related to brain-drain by transforming it into brain-gain (while enhancing brain circulation), which is an "excellent antidote to chronic brain-drain" (Teferra 2004:242).

3.9   The Brain-Gain Drive: Foreign Faculty Hiring Program (FFHP)

Today, many countries - for instance Japan, Korea, and Finland - have adopted new policies and programs regarding hiring and retaining foreign academic staff and faculty from around the world (see Cyranoski 2002; Aoki 2005). However, some countries - for instance Australia, Canada and the USA - have traditionally been open to hiring academics from overseas, while others including France and Germany have barriers to hiring foreign academic staff due to immigration reasons. Newer academic systems, including those in the Gulf States and Singapore, hire foreign academics either on a permanent or a contractual basis (Altbach & Teichler 2001:8). This indicates that foreign faculty hiring is a popular trend among developed countries, which on the one hand encourages international interaction and on the other promotes academic involvement with local faculty members.

In the present time, with the transformation of the global economy into a knowledge-based economy, high quality PhD level faculty is recognized as the most important asset of any nation. Given Pakistan's recent educational history, universities and research centers were needed to be strengthened by the induction of highly qualified academics from technologically advanced countries. Due to this reason, in 2003, HEC conducted a need assessment survey of all public sector universities and DAI's in order to assess the shortage of highly qualified faculty as well as the need for foreign faculty members. According to the survey, almost all public sector institutions of higher education embarked on the need of foreign faculty for their graduate/post-graduate programs. Therefore, in response to ease this critical shortage, HEC developed following faculty hiring programs to create a strong base of PhD faculty in Pakistan.

- Foreign Faculty Hiring Program (FFHP) *(for one year or more)*
- Short-Term Foreign Faculty Hiring Program (SFFHP) *(for three to six months)*
- Placement of Fresh PhD Scholars Returning from Abroad Program *(HEC-scholarship)*
- Short Term Teacher Exchange Program *(local)*
- HEC Distinguish National Professor
- Visiting Scholar Program
- Hiring of Eminent Educationists and Researchers having PhD *(Expansion Program)*

Within HEC's vast range of programs, FFHP is one such project which occupies the center stage in Pakistan. The project was officially launched in October 2003, under the National Higher Education Policy, at cost of Pak Rs.3285.912 million for five years. The project was

initiated to attract PhD[44] degree holders, foreign nationals or an expatriate Pakistanis (who are/have permanently settled abroad), having distinguished teaching and research record as well as excellent English communication skills. The goal of this program is to hire 300 foreign faculty members each year for the period of 5 years (i.e. a total of 1500 foreign faculty members until 2008) in order to meet the disciplines-wise demand of public sector universities/DAI's relevant to the economic and social development of Pakistan (see Appendix G). Besides, the aim of this project is to fill the vast gap of qualified research academics and PhD supervisors, while reversing the brain-drain into brain-gain. Therefore, FFHP was specially introduced to tap the human resources of foreign/expatriate educators in a manner that could be financially acceptable to them, while attracting "the best talent back to Pakistan and work for this country" (Naqvi 2003; WB 2006:29). The eligibility criteria established by HEC for foreign professors interested to work in the higher education sector is shown in Table 2.[45] The minimum duration of the hiring contract for FFHP is of 1-year (which is extended up to 5 years) with attractive terms and conditions (see Appendix H). However, for the selection of foreign faculty members, HEC has not mentioned any specific age limit under the FFHP.

Category	Qualifications	Minimum Post PhD Teaching &/or Research Experience	Consolidated Salary Packages
Foreign Professor FP-I *(Professor)*	PhD	12 years	Rs. 180,000 to 250,000 p/m *(approx US$3100 to 4300)*
Foreign Professor FP-II *(Associate Professor)*	PhD	08 years	Rs. 120,000 to 181,000 p/m *(approx US$2000 to 3000)*
Foreign Professor FP-III *(Assistant Professor)*	PhD	05 years	Rs. 80,000 to 129,000 p/m *(approx US$1300 to 2275)*

Table 2 Eligibility Criteria for Foreign Faculty Members[46]

In addition to lucrative package of incentives in the form of high salary, for all selected academics, the HEC is offering housing and pick and drop facilities, economy class air-

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[44] Special waiver of PhD degree is given to the applicants belonging to clinical medical sciences disciplines, who hold terminal degree of MRCP, FRCS (UK) or Diplomat American Board with the condition that the prospective candidates must have served as a faculty member in a recognized foreign university.
[45] According to HEC, as a policy matter, all selected applicants shall assume the title of *"Foreign Professor"* to avoid administrative ambiguities.
[46] Source: HEC-FFHP, Eligibility Criteria www.hec.gov.pk/HRD/faculty_hiring_programs.htm

tickets, massive research funding (upto US$100,000 per project and US$600,000 per international linkage program), excellent institutional facilities and 75% reduction of income tax (Atta-ur-Rahman 2006a; 2006b).

Table 3 summarizes the total number of foreign faculty members who were attracted under FFHP from 2003/04 to 2006/07 fiscal year. According to the data a total number of 872 foreign faculty members have been selected since 2003/04 and made job offers, whereas only 366 were attracted to return to Pakistan through the FFHP.

Foreign Faculty Attracted under FFHP	Fiscal Year				
	2003/04	2004/05	2005/06	2006/07	
					Total
Applications Received by HEC	475	802	N/A	222	1499
Eligible Candidates	275	458	N/A	201	934
Not Eligible Candidates	200	344	N/A	21	565
Candidates Selected & Offers Made	126	264	372	110	872
Joined Candidates	*31*	*101*	*158*	*76*	*366*
Offers Not Availed/Regretted to Join	N/A	35	45	N/A	80
Contract Extension	N/A	N/A	101	N/A	101
Not Recommended by Review Committee	N/A	77	N/A	N/A	77

Table 3 Foreign Faculty Attracted Under FFHP, from 2002/03 to 2006/07 [47]

These figures indicate that the movement of foreign academics into Pakistan is progressing, however, at a slow pace but with a low turnover, quite far behind the goal of this program (i.e. to hire 300 foreign faculty members each year) set by the HEC. But it is anticipated that the major impact will only be demonstrated over the coming 3-4 years (HEC-Annual Report 2004-05:21). Besides, the interest of foreign faculty members in joining FFHP indicates the commitment of the HEC, to addressing the challenges of globalization and internationalization, through the perception that by employing foreign nationals and expatriates HEC is improving and enhancing the international experience for both teachers and students at the higher education institutions.

According to the HEC Chairman, Pakistan is undergoing a "knowledge revolution" and the best thing about the change is that the country has succeeded in reversing the brain-drain

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[47] Source: HEC-Annual Report (2003/04:32; 2004/05:21-23; 2005/06:31; & 2006/07:97).

(Education: News & Events 2006). The ongoing efforts of the HEC, as discussed above, have been outlined by a recent UN document, based on its finding, which states the case of Pakistan as an example in turning the *brain-drain* into *brain-gain*. The UNCTAD (2005:8) report says:

> *In recognition of the crucial importance of human resource development, especially in such key areas as basic sciences, engineering, IT, biotechnology and new materials, the Government plans to produce 1500 PhD graduates each year, with 1000 funded scholarships […]* ***Special measures have been adopted to prevent the "brain drain", including favourable working conditions and facilities, as well as highly competitive salaries for university researchers*** *[...] University faculty members have been awarded special research productivity allowance, S&T allowance and tenure track positions.* ***A Professor conducting high impact research would be offered a salary nearly four times higher than that of a Federal Minister****. Enterprises that interact with university-based research laboratories have been offered venture capital, tax benefits and other incentives.*

The UN document clearly praises the current situation by highlighting the gigantic measures taken by the Government of Pakistan and HEC, which has started to bring a 'silent revolution' of knowledge in Pakistan. Thus, by importing this wealth of knowledge and research experience from abroad, in the shape of "human capital"[48], the HEC aims to promote innovative research and build sustainable international link. No doubt, the Commission has prepared the ground ready for sowing the higher education brain-seed for future cultivation.

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[48] Human capital refers to the accumulation of knowledge, skills and qualifications. It relates to investment of using resources to build up a stock of additional resources *(human capital)* that will derive a return (Schuller *et al.* 2004:6-8).

4   METHODOLOGY

The current chapter deals with the research methodology followed in conducting this study. It starts with an outline of two common research approaches (i.e. quantitative and qualitative methods) and followed by the appropriate *(qualitative)* research methodology and the associated research design *(case study)* selected for this thesis. It also presents substantiated reasons for the choice of the qualitative case study, and explains the *data collection* strategies and procedures, utilizing the mixed methods approach, for analysis of documentations and Web-SAQ. Finally, issues related to the study limitations were outlined and brought to light.

4.1   Quantitative versus Qualitative Methods

A research methodology is the generic approach of employing one or more research methods to understand and answer the research questions. However, each of these methods represents a fundamentally different inquiry paradigm,[49] and the researcher's actions are based on the underlying assumptions of each paradigm (Heath 1997). These two methods are known as quantitative (numeric information) and qualitative (text information) methods (e.g. Merriam 1998; Creswell 1998; Neuman 1997), which are broadly classified into two distinct approaches "the scientific empirical tradition and the naturalistic[50] phenomenological modes" (Burns 1997:3). According to Hoepfl (1997:[online]) quantitative research uses experimental methods and quantitative measures to test hypothetical generalizations[51] whereas qualitative research uses a naturalistic approach that seeks to understand phenomena in context-specific settings. She further describes that,

> *Quantitative researchers seek causal determination, prediction, and generalization of findings while qualitative researchers seek instead illumination, understanding, and extrapolation to similar situations.*

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[49] **Paradigms**, as defined by Kuhn (1962/1996:3) are "accepted examples of actual scientific practice...(that) provide models from which spring particular coherent traditions of scientific research." These paradigms, *(the positivist/empiricist orientation, the constructivist/naturalist worldview, and the pragmatic model)*, support the use of quantitative, qualitative, or a combination or mix of both methods as dictated by the research questions (Tashakkori & Teddlie, 1998:3) which reflect the researchers' worldviews or belief systems and guide them in their choice of research methods.

[50] **Naturalistic** approach is used in unique or complex situations, when the level of uncertainty about the questions to ask is high and when there is little or no theory to direct the investigator. *The methods used in case study research are similar to those of naturalistic inquiry* (Management Research in VA, 2001 [online]).

[51] **Generalizations** is defined as the degree to which the findings can be generalized from the study sample to the entire population (Polit & Hungler, 1991:645 cited in Myers 2000:[online]).

Creswell (1998:17), on the other hand, has explained the different reasons for using qualitative and quantitative research study. She notes that,

> *In a qualitative study, the research question often starts with a '**how**' or '**what**' so that initial forays into the topic describe what is going on. This is in contrast to quantitative questions that ask '**why**' and look for a comparison of groups or a relationship between variables with the intent of establishing an association, relationship, or cause and effect.*

In this perspective, the methodological approach which the researcher found suitable for this study falls within the qualitative research paradigm. Marshall and Rossman (2006:1-5) describe this "paradigm" that allows the researcher to get an "insider perspective" in order to investigate a little understood social phenomena[52] from the "participants' perspective" (McMillan & Schumacher 1993:372; 2001:16; Zainal 2007).

4.2   Qualitative Method as Selected Research Approach

Qualitative research methods are used to find out more about what "people do, know, think, and feel" (Patton 2002:145) in order to view their world and the experiences they have in the world. Quite simply, qualitative research deals with data that exist in the minds of individuals and are expressed verbally and non-verbally (Prinsloo *et al.* 1996:287). It means that, qualitative research is beneficial when unquantifiable data like thoughts, opinions, perceptions, feelings, values and norms are being looked for and is "uniquely suited to uncovering the unexpected and exploring new avenues" (Marshall & Rossman 2006:38; see Patton 1990). In order to make base of using qualitative methodology, Hoepfl (1997: [online]) also suggests that, the "research problems tend to be framed as open-ended questions that will support discovery of new information."

The present research is, therefore, framed within *'what'* and *'how'* questions (Creswell 1998:17; Blaikie 2000:60; Yin 2003:9) to gather new information regarding the interest of foreign faculty members in joining the FFHP and to describe their perspective related to the Pakistani higher education environment. Similarly, the qualitative approach was chosen to explore and understand the importance of the FFHP while exploring the higher education and reform trends as a whole. Using qualitative methodology also helped the researcher to

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[52] **Social phenomena** is a term that includes identity (individual and collective), culture, symbols, ideas, norms, principles, narratives, and collectively held beliefs (Johnson 2000: [online]).

contextualize the hiring of European foreign faculty in the 19th century India and to reveal its historical perspectives.

4.3   Research Design

Yin (2003) proposes that a research design is "a logical plan for getting from *here* to *there*." According to him "*here* may be defined as the initial set of questions to be answered, and *there* is some set of conclusions *[answers]* about these questions" (Ibid.:20; see also McMillan & Schumacher 1993:31; Creswell 2003:13). The research design helps the researcher to understand what type of information to collect and from whom. According to Hammersley and Atkinson (1995:24) "research design should be a reflexive process operating through every stage of a project." This suggests that the researcher should design the study according to the research question they seek to answer. Given the desire to understand both *'what'* and *'how'* types of research questions, qualitative approach therefore fits well this study. However, the researcher has also utilized quantitative method by using descriptive statistics, mostly as percentages/mean scores, in order to present quantifiable data in a manageable form (Trochim 2000). Nevertheless, keeping in view the qualitative research paradigm, the research design which the researcher has selected for this study - as the strategy of inquiry - has taken the form of qualitative case study methodology.

4.4   Case Study

As described by various authors, (Stake 1995; Merriam 1998; Patton 2002; Yin 2003; Creswell 2003; Marshall & Rossman 2006), the *'case'* could be a person such as a teacher; a group; a program; an organization; a specific policy; and so on. Yin (2003:13) describes case study as a research tool which is widely accepted as "an empirical inquiry that investigates a contemporary phenomenon within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident." According to Bless and Higson-Smith (1995:44), the case study is used "as a way of organizing social data and looking at individuals, a small group of participants, or a group as a whole." Creswell (2003:15), on the one hand, maintains that, in a case study "the researcher explores in depth a program, an event, an activity, a process or one or more individuals."

Accordingly, Merriam (1998:19), on the other hand, provides a clear justification for the use of case study design by stating that:

> *To gain an in-depth understanding of the situation and meaning for those involved. The interest is in process rather than outcomes, in context rather than a specific variable, in discovery rather than confirmation. Insights gleaned from case studies can directly influence policy, practice, and future research.*

In short, a case study emphasizes detailed contextual analysis and "examine a topic in which there has been little previous research" and designed to stimulate "further inquiry" (McMillan & Schumacher 2001:399). Given this background, the researcher provides four specific reasons that can be used to justify why the qualitative case study methodology was the proper choice for this study:

- *Firstly*, because of the apparently limited research on the issues at hand, case studies - as stated earlier - are appropriate in areas in which the existing research is scarce.
- *Secondly*, the research question deals with exploratory issues, rather than frequencies or incidence, and case study strategy is, therefore, appropriate in this context.
- *Thirdly*, the case study methodology can also serve as a powerful tool to answer the *"how"* questions (Yin 2003:9). Therefore, it was well suited to the research interest of this study since the researcher intends to look for answers for *how* foreign faculty members feel about FFHP while working in the Pakistani context.
- *Finally*, the case study research typically allows combining different data collection or analysis methods, and even if these methods are both qualitative and quantitative (Yin 1993), that may contribute to the trustworthiness of the data.

Keeping in view the perspective of this research, the case study approach will help the researcher to build rich descriptions of complex and diverse circumstances that have not been, so far, fully explored with regard to FFHP. However, it must be noted that *the researcher does not intent to search out data or evidence to prove or disapprove any hypothesis or test theory*; rather the findings and conclusions emerge from disparate pieces of data. Based on the above justifications, and the rationale identified earlier in this chapter, a case study approach was appropriate for this investigation.

Furthermore, as the focus is mainly concerned with the foreign faculty, this study was therefore organized around a single case study of FFHP. The researcher used a single case

study design because the purpose was to gather in-depth understanding or insights about the FFHP and to analyze its strength and weaknesses from the *'participant's perspective'*. Such strategy helps a researcher to go beyond the statistical formulas and, as mentioned earlier, understand the behavioural conditions through the "participant's perspective" (McMillan & Schumacher 1993; 2001; Zainal 2007). This strategy facilitated the researcher to investigate and understand how foreign faculty members have responded to FFHP project. Although, using a single case study raises questions about the generalizations; however Yin (2003:14) has pointed out that scientific generalization of results is made to theory and *not to* populations or universe. Besides, the goal of this study is not to generalize but to understand and describe the particulars of the case in all its complexity (see Lincoln & Guba 1985; Merriam 1998; Gummesson 2000; Blaikie 2000; Yin 2003). In this perspective, individuals will, therefore, make their connections between the study and their own experiences and when they do this, "user or reader generalizability" will be achieved (Walker 1980; cited in Merriam 1998:208). Consequently, these will not be conclusions asserted by the researcher, but ideas which have 'transferability' not in terms of universal issues, but in the form of "concrete universals" (Erickson 1986; cited in Merriam 1998:210).

4.5 Data Collection Strategies and Procedures

There are several techniques that can be applied for the data collection and the aim of the researcher should be to find an appropriate combination of data sources to provide a complete understanding of the research. According to Myers (1997) the choice of research methods - either quantitative or qualitative - influences the way in which the researcher collects data. Darlington and Scott (2002) state that the most appropriate data collection method is the one that best suits the research purpose and objectives, and also fits the chosen methodology and design. As this study basically fits within the qualitative case study methodology, it typically utilizes multiple data collection methods (Eisenhardt 1989:534; Marshall & Rossman 1999:159; Yin 2003:5) that enables a researcher to closely examine the data within a specific context while maintaining the research criterion of credibility,[53] transferability,[54]

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[53] **Credibility** is associated with the trustworthiness and/or authenticity of the data and the data analysis, which depends on the ability and effort of the researcher (Lincoln & Guba 1985:300; Patton 2002:14).

[54] **Transferability** is related to the extent to which other researchers can apply the findings to other contexts or replicated the research by using other participants (Babbie & Mouton 2001:277).

dependability,[55] and confirmability[56] (see Lincoln & Guba 1985; Krefting 1991; Babbie & Mouton 2001). Research data can be collected by several different means; such as observations, interviews, assessment records, documentations/literature study, tests, unobtrusive measures, surveys, questionnaires, etc. (McMillan & Schumacher 1993; Hodder 1994; Hoepfl 1997; Cohen & Morrison 2000; Patton 2002; Yin 2003). The two conventional methods, widely used as a means of data collection in educational research, are based on *'questionnaire'* and *'documentation'* that were applied in this study.

4.5.1 Questionnaire as Research Tool

A questionnaire is an effective research instrument or tool used for data collection (to get responses on closed-ended and/or open-ended questions)[57] from many participants. According to Brace (2004:5), the questionnaire is the "medium of communication between the researcher and the subject." Leedy (1993:187) states that "questionnaires are one of the best impersonal observation techniques used for eliciting data" that helps the respondents "to respond more honestly because of anonymity" (Neuman 1997:38). McMillan and Schumacher (1993; 2001) point out that, in developing a questionnaire, the researcher selects a set of questions requesting respondents to answer them, *usually* in a form that asks the respondents to check and select their perceived response.

In order to evaluate reactions of foreign faculty members working within Pakistani higher education arena, a "mixed methods approach" was utilized for the web self-administered questionnaire (Web-SAQ).[58] According to Creswell *et al.* (2004:3) "mixed methods research involves collecting, analyzing, and integrating both quantitative and qualitative data in a single study or in multiple studies in a sustained program of inquiry." It seemed logical as most questions in the Web-SAQ were quantitative; however two main questions were qualitative in nature that allowed exploration of a richer picture. In the light of this, responses were related to the objectives of the study and various themes were identified under which

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[55] **Dependability** refers to the extent to which the researcher's categories and explanations correlate to what is actually true and it relates to how consistent the findings are (Krefting 1991:221).

[56] **Confirmability** refers to the degree to which the researcher demonstrates the neutrality of the research interpretations, through a "confirmability audit" (Lincoln & Guba 1985:320).

[57] Close-ended questions limit the respondent to the set of alternatives being offered, while open-ended questions allow the respondent to express an opinion without being influenced by the researcher (Foddy 1993: 127 cited in Reja *et al.* 2003:161).

[58] In **Web-SAQ** the respondents read and answer questions via computers and complete the questionnaire individually on the web in places (home or office) with Internet connection. The information is stored on a server through an Internet connection and is used to facilitate the entry of data by respondents (Couper 2001).

data was analyzed. Web-SAQ was also chosen as the most suitable method because it is fast and relatively inexpensive way to collect empirical data from the target group (i.e. foreign faculty). The research uses two different techniques as follows:

1. *Basic descriptive statistics through reporting of percentages and mean responses of foreign faculty via SurveyGizmo,[59] and*
2. *Qualitative content analysis of open-ended responses.*

The Web-SAQ helped the researcher to understand and explore issues of cross-cultural identity, how foreign faculty members viewed themselves in an international role, how this international opportunity changed their lives, and how their present experience in Pakistan affected them in relation to making a brain-gain contribution to the higher education system in Pakistan. Additionally, the Web-SAQ helped the researcher generate responses on how foreign faculty members saw themselves in their current position and what types of challenges and problems they faced in the host culture. In developing an online questionnaire, Barnes (2001:1) suggests that, "the obvious first step is to ensure that your questionnaire is interesting, topical and one that participants will want to complete *[as well as]* look professional and look good to the eye." According to Couper *et al.* (2001) the design of a web-questionnaire can affect the response rate, the dropout rate, and even the responses themselves. Keeping this in view, the researcher utilized the services of SurveyGizmo and designed a multi-page FFHP questionnaire with emails to invite and thank the subjects.

The Web-SAQ was divided into six themes consisting of 30 questions (28 closed-ended and 2 open-ended questions) with an estimated/calculated time needed to complete was recorded between 15 to 20 minutes. All the questions were mixed in drawing from the participants' personal, social, academic and professional lives (see Chapter 5, section 5.1). The email was used to introduce the study, explain its purpose related to research question, and to gain cooperation by emphasizing the importance of responding (Barnes 2001:2). The first official Web-SAQ, with accompanying email invitation and a presentation letter (see Appendix I and Appendix J, respectively), signed by the Chair and Director of Higher Education Group (HEG) was sent to 145 individual members of foreign faculty on April 12, 2008.

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[59] SurveyGizmo is a powerful Internet survey software package - that has an easy-to-use wizard design interface with graphical real-time analysis and reporting facility to compare and generate the research results. For more information, please visit SurveyGizmo: www.surveygizmo.com

A unique URL[60] for each participant (generated by SurveyGizmo to maintain confidentiality) was merged with every email invite, specific to respondents' session, and the participants were instructed to visit the website to complete the online FFHP-questionnaire. To avoid duplicate answers, the researcher used an online 'Duplicate Protection' tool for limiting one person to one response. All participants received an appreciation email upon completion of the Web-SAQ and, simultaneously, a carbon copy of confirmation email was auto sent to the researcher's email. All the coded responses (having a unique ID) were automatically aggregated in text files and stored at SurveyGizmo secure server. This online procedure helped the researcher to track the IDs and response rates per day on who has completed the Web-SAQ, while maintaining the respondent's anonymity. Ten days after the first email invite, a second reminder was sent on 22nd April. Likewise, a last reminder was emailed on 30th April to all those subjects who had not completed the questionnaire. Finally, the online-link was closed on Friday, May 9, 2008 at 24:00.[61] The layout of the Internet version of Web-SAQ [62] is shown in Figure 3 and a paper-based version appears in Appendix K.
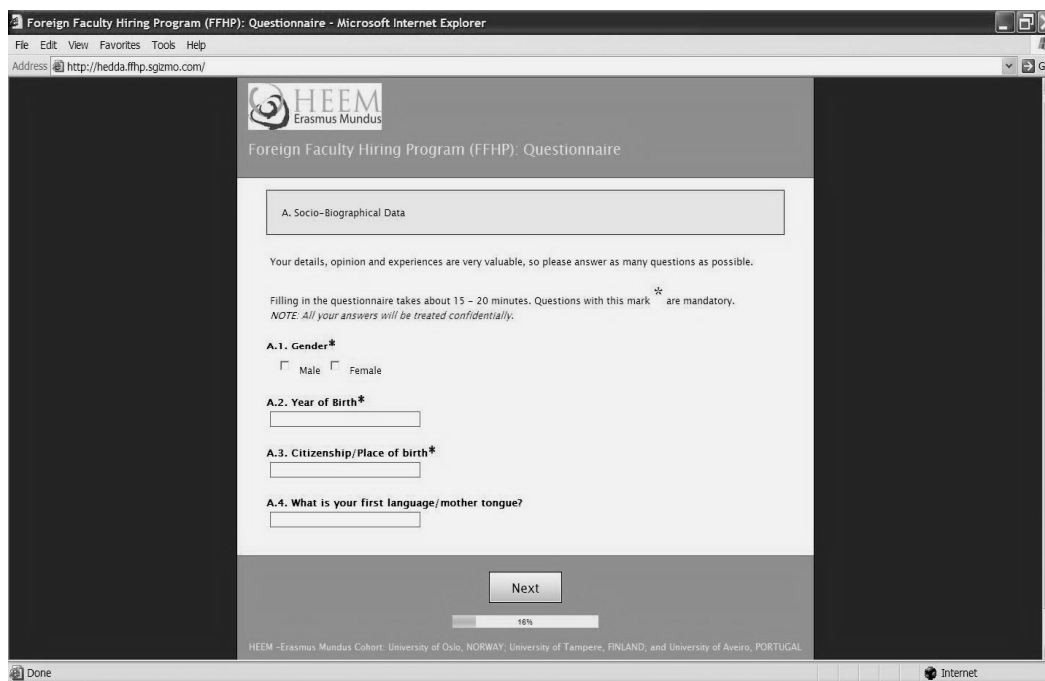
Figure 3 Screenshot of the Internet version of Web-SAQ *(or FFHP-Questionnaire)*

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[60] A URL (Uniform Resource Locator, previously Universal Resource Locator) is a compact string of characters used to represent a resource available on the Internet. The most common use of a URL is to designate an address on the World Wide Web (WWW).
[61] Officially closed link of FFHP-Questionnaire: http://heem.ffhp.sgizmo.com
[62] Exact working sample of FFHP-Questionnaire: http://hedda.ffhp.sgizmo.com

4.5.2 Documentation: Collection, Review and Analysis

As discussed earlier, there are a variety of sources and methods of data generation and one main method associated with qualitative research - adopted for this case study - is the collection of documentations. In this study, the researcher gathered the authentic information by way of several different document reviews, made available from academic libraries and websites, included; historical text and online data from the Higher Education Commission and from the Ministry of Education and Finance, Task Force/World Bank reports, Government accreditation and policy documents, published books/unpublished dissertations and theses, research reports and working papers, newsletters, magazines, scientific periodicals and journals articles, press releases and other relevant data available on the Internet. For statistical purpose, quantitative data was collected from the official documents and websites to supplement the research with exact facts and figures.

In case study research, document review is important because texts discuss policies, procedures or events (Hodder 1994; Yin 2003). According to Lincoln & Guba (1985) documents and records are useful sources of information but are often ignored by many researchers. The value and their usefulness is likely based on their stability, in that they can be reviewed repeatedly and validate information obtained from other sources (Yin 2003), which can be invaluable to competent qualitative researchers (Hoepfl 1997). Henning *et al.* (2004:101) state that, "the true test of a competent qualitative researcher comes in the analysis of the data, a process that requires analytical craftsmanship and the ability to capture understanding of the data in writing." Besides, for the analysis and composition of qualitative data, Patton (2002:432) puts it: "…no absolute rules exist except perhaps this: Do your very best with your full intellect to fairly represent the data and communicate what the data reveal given the purpose of the study." This statement is supported by Robson (2002:456) who states that, "there is no clear and accepted single set of conventions." Thus, an accepted view of data analysis requirements is that where qualitative data supports quantitative data, it is, therefore, not necessary to perform detailed and complex data analysis.

Document review and analysis also refer to the processing and understanding of the contents in the documents. In this research, documentation review and data analysis provides a clearer and more in-depth understanding of the thesis topic. This process helped the researcher to

develop the contextual framework and to obtain background information pertaining to the higher education reforms and need for FFHP in Pakistan as discussed in Chapter 2 and 3. Similarly, the consideration of documentation before designing the FFHP questionnaire also helped the researcher to come up with some refined questions (see Chapter 5). All the sources were scrutinized and assessed by the researcher and a database was created to manage the collected information that is securely stored on the researcher's notebook computer. The database includes the source of the document by title and type, date of publication, volume and issue, page numbers when applicable and the author's name(s). The researcher reviewed and analyzed every piece of data that was gathered during the thesis process and studied how they relate and support each other, to depict the Web-SAQ as well as the main research question, which finally lead to the findings.

4.6   Research Limitations

In conducting this study a number of limitations existed. Following are some of these issues.

Firstly, this study is not an 'exhaustive critique' of the literature used and this complexity may limit the interpretation of results obtained. Documents used in the early stages of this study were in order to provide the necessary background information for the research. However, it cannot be measured accurately largely due to the *limited* prior "credible research" and "dependable data" available on the foreign faculty or FFHP project. Therefore, assuming the participants' truthfulness, the study's qualitative findings were based only upon the perceptions and thoughts of foreign faculty members.

Secondly, studies have also shown that *some* participants may not be willing to provide all information honestly, depending on what, or who, they are answering (Marshall & Rossman 2006). Thus, the researcher also declares that the data collected through Web-SAQ is, therefore, based only on foreign faculty member's viewpoints and expression, which may indeed be different from the HEC's or the researchers' perspective.

Thirdly, the online web-list of "Approved PhD Supervisors",[63] officially received by the HEC authorities, (on April 09, 2008), contained *only* 185 email addresses of foreign faculty

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[63] The list include "unclassified bio-data and contact addresses" of local/foreign professors, available on the HEC website. For more information, please visit: http://app.hec.gov.pk/sup_sch_lists/sup_list.asp

members instead of 215 (After confirmation, it was known that this limitation was with regard to unavailability of the email addresses in the HEC's database). Besides, among these 185 contacts, 24 contacts were void due to identical email whereas 11 email addresses were inactive. Similarly, 5 individuals contacted the researcher stating that they are no longer affiliated with FFHP and have already left Pakistan. As a result, it was then only possible to send the Web-SAQ invitation to the remaining 145 on job foreign faculty members via email.

Fourthly, in the light of above limitations, the concept of generalizability would also be a likely limitation in this case study; as the size of total respondents representing FFHP were "small" *(n = 43).* In this regard, the researcher has made no claims for the external validity of the findings. However, due to descriptive/explorative and non-generalizable nature of the study, *the findings are not being used to prove or disapprove any hypothesis or test theory.* Rather, the investigation and the findings were used to account the three fold objectives of this study, in hope that it will shed light on the strength and weaknesses of FFHP especially from the participant's perspective. In other words, the goal of the case study was not to generalize the findings but to provide exploratory evidence of the events that are occurring in an environment (see Lincoln & Guba 1985; Merriam 1998; Gummesson 2000; Blaikie 2000; Yin 2003) with reference to FFHP project.

Lastly, this research was conducted as part of an intensive HEEM-European Masters in Higher Education program, with certain limitations of time constraints on completing the thesis. Therefore, keeping in view the amount of questions in the FFHP-questionnaire, this time-bound study did not allowed the researcher to manually convert the data into SPSS *(Statistical Package for the Social Sciences)* in order to make further quantifiable assessment and/or detailed analysis. Therefore, it somehow restricted the researcher to rely upon the data statistically generated and tabulated by SurveyGizmo.

By considering all these shortcomings associated with this work, perhaps this study could serve as a basis for further research and detailed analysis of the FFHP project in future. However, regardless of the limitations outlined above, the researcher hopes that he has made a modest contribution through this work to the Pakistani higher education in particular and to the field of higher education in general.

5 PRESENTATION AND ANALYSIS OF FFHP WEB-SAQ

In the preceding chapter, the methodological approach for this qualitative case study was discussed in detail. The current chapter deals with the presentation and analysis of the web self-administered questionnaire. It contains two sections. The first section 5.1 outlines the presentation of Web-SAQ while section 5.2 describes the analysis of Web-SAQ aimed at meeting the objectives of this study. The researcher examined the data utilizing the "mixed methods approach" by using two different techniques as mentioned in the previous chapter (section 4.5.1 and 4.5.2 respectively). In the subsequent section, 5.2.1, the close-ended questions were analyzed quantitatively using simple descriptive statistics and also through graphical analysis generated via SurveyGizmo, which is presented in a manageable form in order to describe the data (Trochim 2000). Through this process the researcher reported and explained the quantitative interpretation of the data collected by Web-SAQ. In the analysis of open-ended questions, qualitative content analysis method was utilized by manually coding the data, and identifying the positive and negative themes more clearly in a descriptive form, which is presented in section 5.2.2. This qualitative analytic procedure followed in sorting the data, referred to as coding, can be described as "working with data, organizing it, breaking it into manageable units, synthesizing it, searching for patterns, discovering what is important and what is to be learned, and deciding what to tell other" (Bogdan & Biklen 1982:145; see Marshall & Rossman 2006).

Based on the analysis of Web-SAQ, the final chapter of this study provides basis of the main findings that unfold the three-fold objectives of this study: (1) the prime interest of foreign faculty members in joining FFHP; (2) their expectations, experiences and problems while working in the domestic environment; (3) their role in reversing the 'brain-drain' and suggestions for the improvement of higher education in general and FFHP in particular. Moreover, the information that the researcher received, examined and analyzed broadly, covers the research question, which this study attempt to answer in Chapter 6. Thus, on the basis of these findings, the researcher had drawn conclusions and also made some possible recommendations, as well as well, grounded suggestions that may be of interest to general readers and Higher Education researchers for further study.

5.1 Presentation of Web-SAQ

For the sake of this case study, a web self-administered questionnaire was used in order to collect empirical data, consisting of 30 different questions (28 closed-ended and 2 open-ended) that were divided into *six* main themes. The Web-SAQ was sent to **145 recipients** currently serving in the public sector universities and DAI's of Pakistan. The total responses that were received by the researcher from 12th April to 9th May 2008 were **43 in number**, including *only* 5 partially completed responses, making a total of **30% response rate** that is "considered good" for on-line Questionnaires (Barnes 2001:1). Following is the presentation of the themes included in the Web-SAQ (see Appendix K for the exact paper-based version of Web-SAQ).

A. Socio-Biographical Data (4 questions)

B. Professional Background (4 questions)

C. Current Employment (3 questions)

D. Teaching and Research Productivity (3 questions)

E. Work Situation (4 questions)

F. Personal Motivation and Perceived Impact of FFHP (12 questions)

A. Socio-Biographical Data

In this part four (4) questions were asked, which included *A-1*: gender; *A-2*: year of birth; *A-3*: citizenship/place of birth; and *A-4*: first language/mother tongue.

B. Professional Background

This part of the questionnaire had four (4) questions related to respondent's qualifications, academic discipline, and field of research and/or teaching in academia. Question *B-1*: was sub-divided into the following five parts: **a**. Highest degree earned: **b**. Institution that conferred highest degree: **c**. Country in which degree was obtained: **d**. Year of highest degree: and **e**. Area of specialization. Question *B-2*: was related with respondent's major academic field at the host institution. Question *B-3*: asked the respondents to state the difference between their fields of research/teaching or professional activities from their field of highest degree or area of specialization, and in Question *B-4*: the respondent were requested to mention their job status prior to joining FFHP.

C. Current Employment

In this part, three (3) questions were asked from the respondents related to *C-1*: their present position/rank/job title; *C-2*: the name and department/faculty of the university where they are currently employed, and *C-3*: year of joining at the host university/institution.

D. Teaching and Research Productivity

This part of the Questionnaire contained three (3) questions related to teaching and research productivity of foreign faculty members since their joining. Question *D-1*: was basically related with participants' primary interest in teaching or in research and asked them to choose between the four answers. Question *D-2*: asked if participants supervise any dissertation(s) and/or serve on doctoral committee(s), and Question *D-3*: was related to the referred articles published by the respondents during their current job.

E. Work Situation

In this part of the Web-SAQ, four (4) questions were asked, which included *E-1*: departmental facilities, resources, and personnel available to foreign faculty members at the host university; *E-2*: overall quality of local teaching and/or research faculty; *E-3*: improvement in overall working condition; and *E-4*: response towards the benefit students received from the experience of foreign professors.

Concerning the *1st question* regarding the evaluation of departmental facilities, thirteen (13) items were placed, for which respondents were free to select 'Satisfied', 'Neutral', 'Unsatisfied', and 'Not applicable'. With regard to the *2nd question* concerning the overall quality of teaching and/or research by local faculty members at the host institution, the respondents were asked to rate 'Very good', 'Good', 'Fair', 'Poor', and 'Not sure' as their preferred choice. The *3rd question* related to this part was based on the views of the participants on the improvement in working condition, since their joining. The respondents were asked to record their answers as 'Greatly improved', 'Somewhat improved', 'Remained unchanged', 'Greatly declined', and 'Not sure'. The *4th question* was related towards the benefit students have received from the experience of the respondents at the host institution.

F. Personal Motivation and Perceived Impact of FFHP

In this part of the questionnaire, a list of twelve (12) questions *(F-1 to F-12)* were put to the respondents related to their personal motivation and perceived impact of FFHP, including two (2) open-ended questions. Question *F-1*: asked why respondents made the decision to join in the FFHP scheme. In this regard, four items were asked from the participants with a 'Yes' / 'No' option (see Appendix K). Question *F-2*: was based on the impact of FFHP on teaching/research effectiveness at the host institution. Question *F-3*: was related to the impact of FFHP on the efficiency of local faculty members. Question *F-4*: was related to the level of satisfaction among local faculty members with respect to their working conditions related to FFHP scheme. Question *F-5*: was based on the importance of FFHP with regard to improving the overall quality of educational programs and services at the host institution.

Question *F-6*: was related with four aspects, as shown in *Figure 7*, with regard to the implementation of FFHP-related policy in the coming years. All respondents were given a total freedom of thought and choice in the 'Other' column to indicate any other relevant aspect. Question *F-7*: asked the participants to rate the overall satisfaction level with their current job at the host institution. Question *F-8*: was related to the overall satisfaction of the respondents towards joining the FFHP scheme after spending some time at the host institution. Question *F-9*: asked the respondents to express the importance of the FFHP scheme as being useful for reversing the brain-drain into brain-gain. Question *F-10*: asked the participants whether or not they are willing to consider in becoming a permanent faculty member after completion of their current FFHP contract.

In theme F, the Web-SAQ included two (2) open-ended responses, which were separately analyzed in section 5.2.2. In Question *F-11*, the respondents were asked to identify their overall expectation about FFHP and whether if it came true or not. Question *F-12*, was put forward to receive suggestions with regard to further improvements in the higher education sector of Pakistan.

The next section examines the analysis of the Web-SAQ, related to the close-ended and open-ended questions, in accordance with the six themes presented above.

5.2 Analysis of Web-SAQ

5.2.1 Analysis of Close-ended Questions

A. Socio-Biographical Data

The data from the Web-SAQ represents the male (88%; N=38) and female (12 %; N=5) respondents. All the participants ranged from 36 to 75 years of age. With respect to age cohort, after combining into three categories, about (42%) of the respondents ranged between the ages of 36 and 49. Almost half (47%) were between 50 and 69 years old whereas (9%) respondents ranged between 70 and 75 years of age. The mean age for male and female was 54.11 and 48.20 years respectively, whereas the total mean age of the participants was 53.20 years.[64] With regard to citizenship/place of birth, the data indicates that the participants were representing 5 continents and 12 different countries and nationalities. Over half (73%) of the respondents were born in Pakistan and among them (41%) are expatriates having dual citizenship of USA, Canada, UK, Sweden, Germany and Australia. Other foreign nationals (27%) belong to Uzbekistan, Egypt, Russia, Bosnia & Herzegovina, Azerbaijan and Germany. With regard to their mother tongue, those respondents who have roots in Pakistan stated that their first language is Urdu (42%), Punjabi (15%), Sindhi (7%) and Pashto (7%). The remaining foreign nationals mentioned their first language as Arabic (12%), English (5%), Uzbek, Russian, Bosnian (Serbo-Croatian), Azeri and German, (2%) each respectively.

B. Professional Background

With regard to B-1 question, the empirical data represents that all the respondents hold a Doctorate degree in various specialized areas of Engineering, Computer/Networks, Mathematics (Applied & Pure), Physics, Chemistry (Bio & Organic), Clinical Biochemistry, Plant Biotechnology, Molecular Genetics and Microbiology/Cell Biology, Ethnomusicology, Psychology/Behavioral Sciences, Sociology/Dermatology, Economics/Econometrics, Architecture, Islamic Studies, History, and International Relations. Almost half (48%) obtained their doctoral qualifications from the UK. The remaining of participants received their highest degree from USA (16%), Russia (7%), Canada, Germany, Saudi-Arabia and

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[64] For selection of foreign faculty members, the <u>HEC has not mentioned any specific age limit</u> under the FFHP Hiring Program. However, the *only* eligibility criteria for hiring *(Professor, Associate Professor, and Assistant Professor)* is minimum 12, 8, and 5 year respectively with post doctorate experience of working abroad in a reputable academic and/or R&D institution, and at least 3 publications in last five year in refereed journals.

Pakistan (5%) each respectively, as well as (2%) each from Japan, Australia, Bosnia & Herzegovina, and Ireland. All these respondents obtained their Doctorate degree during the year 1958 to 2003. After grouping the years into three categories, it has been found that one fourth (26%) of the respondents earned their degree during 1958 to 1978, around (19%) obtained their degree during 1979 to 1989 whereas over half (51%) of the respondents received Doctorate degree through 1990 to 2003.

For B-2 question, the data in *Table 4* shows seven academic groups related to participants major discipline or field of degree. Data indicates that (29%) respondents have placed their field within Engineering & Technology, and (26%) in Biological & Medical Sciences groups. Other respondents selected Physical Sciences (19%), Social Sciences (14%), and Arts & Humanities (10%) groups respectively. The data highlights that, Engineering & Technology and Biological & Medical Sciences are the two groups that are *over represented* while Agriculture & Veterinary Sciences and Business Education group are *under-represented*.

ITEM	Agriculture & Veterinary Sciences	Arts & Humanities	Biological & Medical Sciences	Business Education	Engineering & Technology	Social Sciences	Physical Sciences	Other	Total
Major field:	-	10% 4	26% 11	-	29% 12	14% 6	19% 8	2% 1	42
Average %:	0.0%	9.5%	26.2%	0.0%	28.6%	14.3%	19.0%	2.4%	

Table 4 Major Academic Field/Discipline of Foreign Faculty Members

In response to B-3 question, regarding the difference between participants academic field of research/teaching, highest level degree or area of specialization, over half (64%) of the respondents stated that their academic/professional activities are 'very similar' according to their qualifications. Besides, about (29%) indicated it as 'similar' and only 7% respondents mentioned it as 'somewhat similar' and 'not at all similar'. As per B-4 question, concerned with respondents job status prior to joining FFHP, almost (86%) responded that they were maintaining permanent posts in their parent institution abroad, while serving as Senior Faculty (76%), *such as Professor*, and as Junior Faculty (10%), *such as Lecturer, Research Associates, and Post-Doctoral fellow*. The other (7%) claimed to be working as Lead Research Engineer and Consultant, while (5%) responded that they were engaged in Industry.

C. Current Employment

With regard to C-1 question, asking the participants about their academic rank/title at the host university, nearly all of the participants (93%) stated that they are working as Professors *(i.e. 86% with a mean age of 54.56)*, Associate Professor *(i.e. 5% with a mean age of 42)*, and as an Assistant Professor *(i.e. 2% with a mean age of 45)*. Only few respondents (5%) stated that they have joined the host institution as a Chairman *(mean age = 59)* and Librarian/Professor *(mean age = 39)* with faculty status respectively. In response to C-2 question, the data indicated that participants are representing twenty one (21) different public sector universities and higher education institutions located in the four provinces of Pakistan.

With regard to C-3 question, the data in *Figure 4* represent those respondents who have mentioned about their joining status since 2004 from 5 different continents.

CONTINENTS	2004	2005	2006	2007	2008	Total N	% of Total N
North America	1	2	3	2	1	9	22%
Europe	1	4	3	1	-	9	22%
Africa	-	1	1	3	-	5	12%
Asia	3	3	7	2	-	15	37%
Australia	-	3	-	-	-	3	7%
TOTAL N	5	13	14	8	1	41	100%
% of Total N	12%	32%	34%	20%	2%	100%	
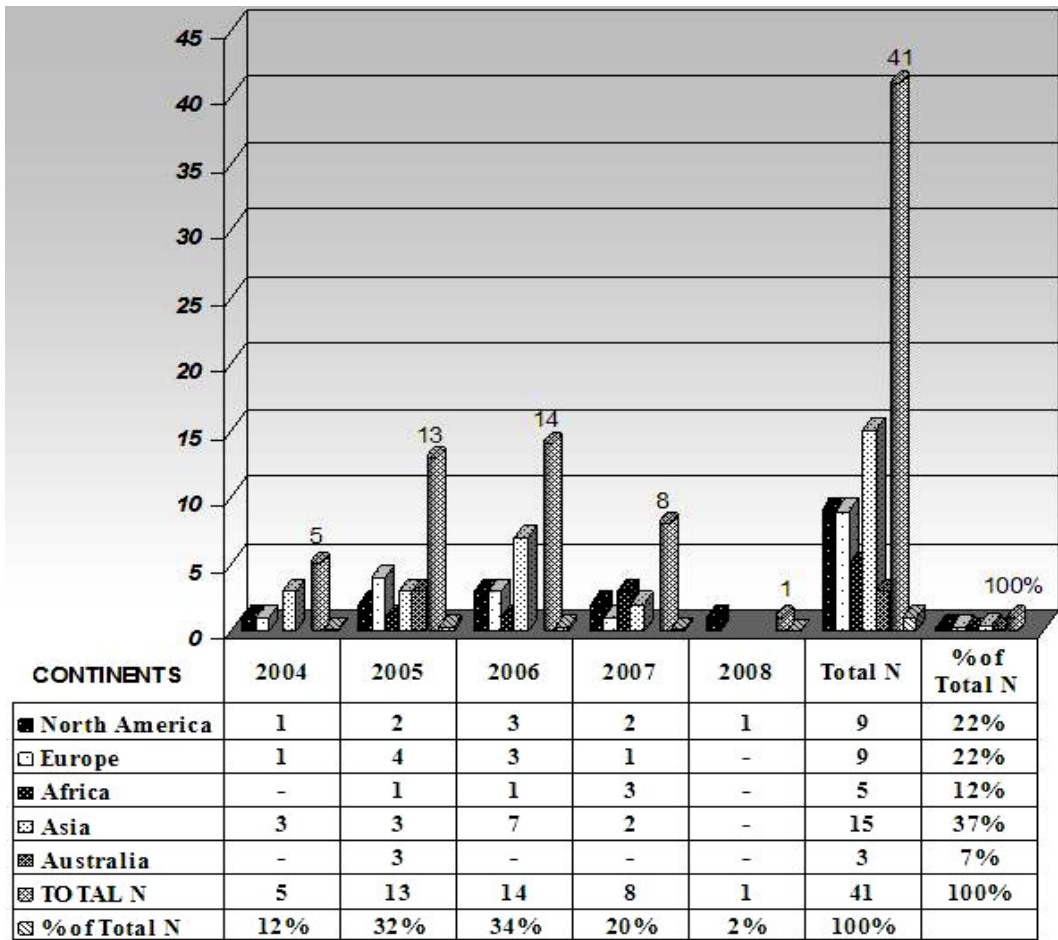
Figure 4 Foreign Faculty Joined the FFHP (2004 to 2008) from Different Continents

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After combining the above data into two categories *(over the period *2004 to 2006 and 2007 to 2008)* it appears that over half (78%) of the respondents joined the FFHP during 2004 to 2006. These participants were particularly from *North America (15%), Europe (19%), Africa (5%), Asia (32%) and Australia (7%)*. Those (22%) who joined the FFHP during the year *2007 to 2008* were from *North America (7%), Europe (3%), Africa (7%), and Asia (5%)*.

D. Teaching and Research Productivity

In D-1 question of this theme, the respondents were asked to indicate their main interest in teaching and/or in research by choosing between the four answers as shown in Figure 5.

SUMMARY		
VALUE	COUNT	PERCENT %
Primary in teaching	0	0%
Primarily in research	5	12%
In both, but leaning towards teaching	12	29%
In both, but leaning towards research	24	59%
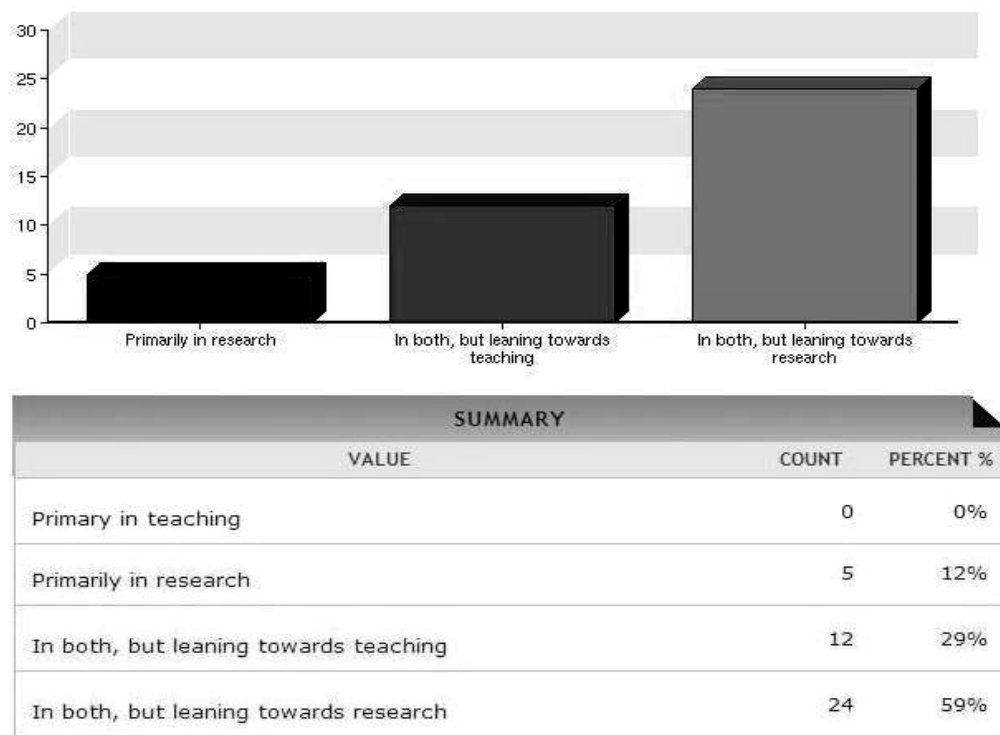
Figure 5 Teaching and/or Research Interest

According to the results, majority of the respondents (59%) paint a picture of high level of research activity by indicating their interest in both, research and teaching, but their receptiveness tends more towards research. Besides, (29%) have expressed their interest in both but with higher propensity towards teaching. Only (12%) respondents have stated that their primarily interest was in research. It is worthwhile to note that none of the participant

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has indicated their interest solely in teaching. This high level of research interest by the respondents is further demonstrated in *Figure 6*.

With respect to D-2 question, related to the supervision of research candidates, nearly all of the respondents (95%) stated that they either supervise a dissertation or serve on a doctoral committee. Among the participants, only one specified that 13 students are currently enrolled as research candidates by that respondent, which is the highest number of candidates supervised by any individual in FFHP. Besides, four other respondents mentioned 10 students, and another two stated that they have enrolled 8 students as their research candidates within the current term of employment.

For D-3 question, the data in *Figure 6* shows that almost half (49%) of the respondents in aggregate have published between *three* to *five* research papers, whereas other respondents (41%) have published between *one* to *two* research papers during their current job at the host university/institution. The remaining (10%) respondents have selected the option as "Not applicable" probably due to their different nature of task/field of work.
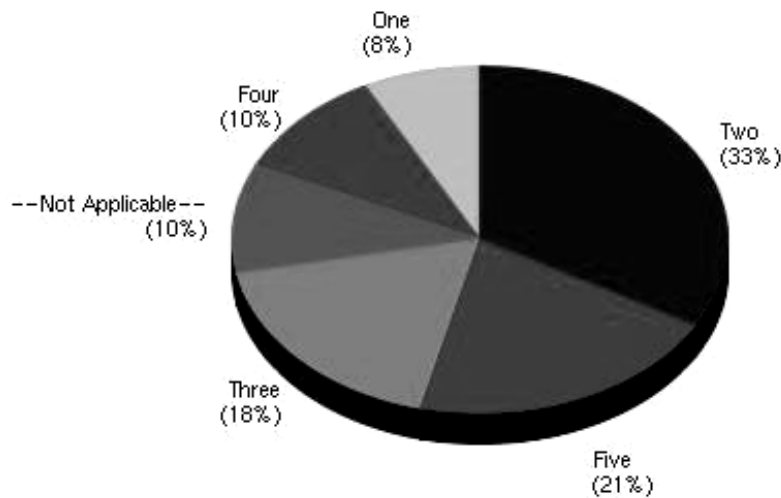
Figure 6 Research Out-put of Foreign Faculty Members during Current Job

The above data represent that the research output among the foreign faculty members is, however, rather high whereas the total mean of the responses stands around 1.88.

E. Work Situation

In response to E-1 question, the data in *Table 5* provides the level of satisfaction of the respondents at the host university for available items *(related to departmental facilities, resources, and personnel)* ordered by the percentage of respondents. On a scale of 1 to 4, with 4 indicating the highest level of satisfaction, only 2 items *(are above 50%)* related to personal work space (53%) and computer facilities (61%) has been reported as *'Satisfied'* by the respondents. The total mean of these two responses stands around 3.3 and 3.4 respectively.

ITEM	Satisfied	Neutral	Unsatisfied	Not Applicable	Avg	Total
Your own personal work space	52.8% 19	19.4% 7	27.8% 10	-	3.3	36
Classrooms and/or auditoriums	40.0% 14	20.0% 7	34.3% 12	5.7% 2	2.9	35
Technology for teaching	30.6% 11	44.4% 16	22.2% 8	2.8% 1	3.0	36
Laboratories	16.7% 6	27.8% 10	36.1% 13	19.4% 7	2.4	36
Research equipment and instruments	25.0% 9	19.4% 7	44.4% 16	11.1% 4	2.6	36
Computer facilities	61.1% 22	19.4% 7	19.4% 7	-	3.4	36
Telecommunications (internet/networks/phone)	41.7% 15	30.6% 11	25.0% 9	2.8% 1	3.1	36
Library facilities and services	20.6% 7	32.4% 11	44.1% 15	2.9% 1	2.7	34
Secretarial support	17.1% 6	37.1% 13	42.9% 15	2.9% 1	2.7	35
Teaching support staff	16.7% 6	33.3% 12	38.9% 14	11.1% 4	2.6	36
Research support staff	16.7% 6	33.3% 12	44.4% 16	5.6% 2	2.6	36
Research funding	38.9% 14	30.6% 11	25.0% 9	5.6% 2	3.0	36
Other facilities	15.6% 5	37.5% 12	34.4% 11	12.5% 4	2.6	32
Average %:	**30.4%**	**29.6%**	**33.7%**	**6.3%**		

Total Responses: 36

Table 5 Evaluation of Departmental Facilities, Resources and Personnel

The data in Table 5 also indicates that for 5 other items related to research equipment (44%), library facilities (44%), secretarial support (43%), teaching support (39%) and research support staff (44%), available to the respondents at the host university, have all been reported as *'Unsatisfied'* with a mean around 2.6 and 2.7 respectively. Moreover, for another 3 items related to teaching technology, telecommunication facilities, and research funding the mean stands around 3.0. However, on an overall average percentage it can be noted from the table that majority of the respondents almost (34%) are 'Unsatisfied' with the available departmental facilities, resources and personnel whereas (30%) are 'Satisfied'. Besides, same numbers of respondents (30%) have reported to remain 'Neutral' while another (6%) answered 'Not applicable'.

In response to E-2 question regarding overall quality of local teaching and/or research faculty members, the majority of the respondents have rated the quality between 'Fair' (35%) and 'Poor' (24%). However, many others have ranked between 'Good' (22%) and 'Very good' (8%), whereas the remaining (11%) have indicated as 'Not sure'. With regard to E-3 question, related to the improvement in work environment, about (22%) of the respondents have stated that the since their joining the overall condition has been 'Greatly improved'. Over half (51%) of the respondents have reported as 'Somewhat improved' and about (22%) respondents have indicated that there has been no further improvement and the working condition has 'Remained unchanged'. Besides, one respondent mentioned that, since joining, the working condition at the host institution has 'Greatly declined' while another respondent stated as 'Not sure'. Based on the response of E-4 question, almost half (49%) respondents feel their students and/or researchers have benefited 'Very much' whereas over half (51%) of the respondents feel their students/research candidates have 'Somewhat' benefited from their experience.

F. Personal Motivation and Perceived Impact of FFHP

With reference to F-1 question, in theme F, majority of the respondents (91%) indicated that they made their decision to join FFHP in order to 'contribute in reversing the brain-drain' whereas a similar amount of respondents (86%) stated that they also made their decision because they needed a 'chance to exercise research and/or teaching' at the host institution. It is worth to reveal that (76%) respondents have reported as they were not interested in 'social

status and prestige' or in 'earning a better salary'. Almost one fourth of the respondents (24%) have clearly mentioned that they have joined the FFHP to seek 'social status and prestige' as well as 'to earn a better salary' in Pakistan.

With regard to F-2 question, related to the impact of FFHP on teaching/research effectiveness, over half (53%) and almost half (42%) of the respondents have placed their answers between 'Very positive' and 'Positive' respectively, whereas some (6%) respondents have chosen to remain 'Neutral' in their answer. In reply to F-3 question, regarding the impact of FFHP on the efficiency of local faculty members, over half (61%) of the respondents have stated that the impact has been 'Positive' while another (17%) stated it was 'Very positive'. Others (19%) have chosen to remain 'Neutral' in their answer, whereas only one respondent has stated that the impact of FFHP scheme on the efficiency of local faculty members have resulted as 'Negative'.

As per the answer of F-4 question, regarding the level of satisfaction among local faculty members with respect to their working conditions related to the FFHP, over half (53%) of the respondents remained 'Neutral' in their response, whereas (27%) respondents in aggregate have mentioned that the level of satisfaction among local faculty members is between 'Very high' (8%) and 'High' (19%). However, other (19%) respondents believe it to be 'Low'.

With regard to the importance of FFHP, in F-5 question, over half (64%) of the respondents believe FFHP has played a 'Very important' role in improving the overall quality of educational programs and services at their host institution whereas over one fourth (28%) respondents think it as an 'Important' program while other (8%) respondents have preferred to remain 'Neutral' in their answer.

According to collected responses for F-6 question, as shown in *Figure 7*, over half (64%) of the respondents have stated that there is 'Not enough internal faculty support', which could be the major aspect as a future problem area for the implementation of FFHP related policy. The other three aspects that the respondents predicted are 'Not enough financial resource' (53%); 'Inadequate national regulations' (50%); and 'Inadequate institutional resources' (50%). Besides, quite a number of respondents (39%) have discovered their response in the 'Other' column by mentioning several different aspects at the internal level of academic

community, usually in department or faculty, and at higher education system level that could create problems confronting the implementation of FFHP-related policy in the coming years.
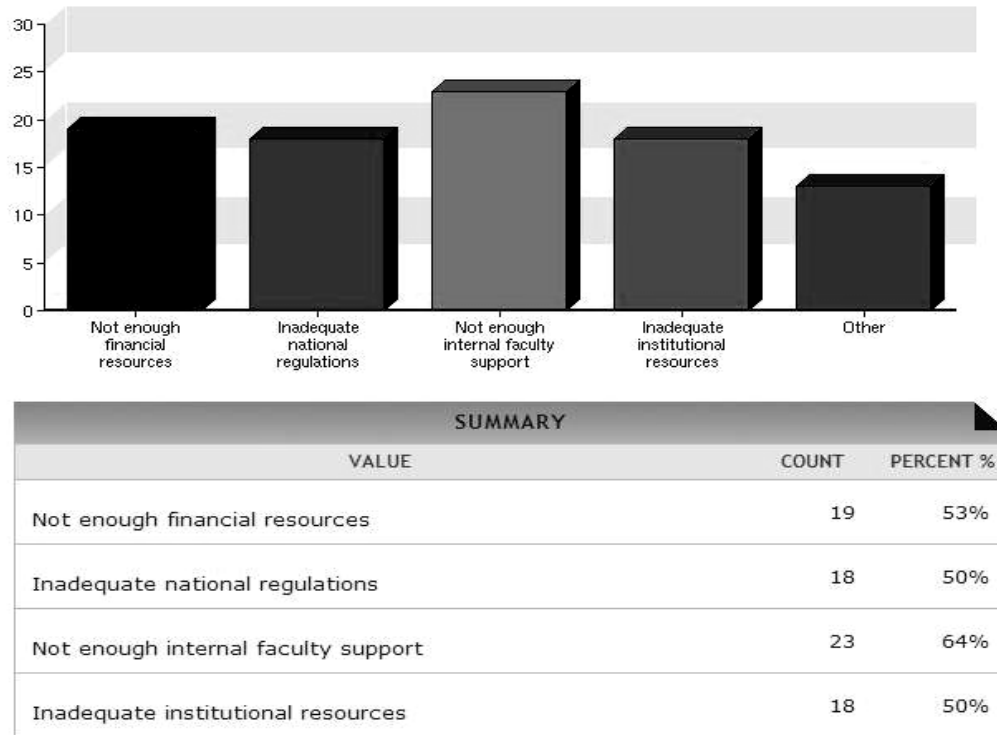
Figure 7 Problems Confronting the Implementation of FFHP Policy

The participants reported other aspects such as: hostile and non-supportive attitude of local administration staff; general jealousy towards foreign faculty; lack of cooperation among foreign and local faculty members; lack of appreciation regarding foreign professors' abilities; inadequate research environment; and university politics. Besides, at the higher education system level, the respondents have indentified the information management failure and failure of responsibility in some level of management at the University and HEC.

In response to F-7 question, over half (58%) of the respondents have stated their overall satisfaction at the current job as 'High' whereas only (8%) have reported it as 'Very high'. The other (22%) respondents have remained as 'Neutral' while some (11%) respondents in aggregate have placed their level of satisfaction at the current job between 'Low' (8%) and 'Very low' (3%).

With respect to F-8 question, related to the overall time spent at the host institution and satisfaction towards joining the FFHP, over half (61%) of the respondents have recorded their answers as 'Satisfied' whereas other (25%) have stated as 'Very satisfied'. Some of the respondents (8%) have remained 'Neutral' while other (6%) have reported as 'Very Dissatisfied'.

In response to F-9 question, over half (64%) of the respondents believe that FFHP is useful and 'Very important' in reversing the brain-drain into brain-gain, whereas over one fourth (31%) of the respondents have reported it as just 'Important'. Only (6%) of the respondents have recorded their response as 'Neutral' or 'Very unimportant'.

With regard to F-10 question, related to becoming a permanent faculty member after the completion of the FFHP contract, over half (51%) of the respondents in aggregate have indicated that they are 'Very much' (31%) and 'Somewhat' (20%) interested whereas over one-fourth (34%) have indicated as they are still 'Undecided'. Besides, a small number of the respondents have expressed that they are 'Very little' (6%) sure and 'Not at all' (9%) interested to stay in Pakistan on a permanent basis.

5.2.2 Analysis of Open-ended Questions

Contained in the FFHP-Questionnaire there were two open-ended qualitative questions where respondents were given the opportunity to express themselves freely. The first question (F-11) was concerned with the participants' expectations. The question was expressed in this form: *Please state your expectation about FFHP and whether if it came true or not?* The second question (F-12) was more general and supplementary in tone, represented in this way: *Please state, what kind of further improvements in the higher education system of Pakistan would you suggest according to your personal experiences?*

After qualitative coding and analysing the large volume of data (Marshall & Rossman 2006), it has been possible to include significant and noteworthy responses/phrases in this section that allowed exploration of the richer picture (a complete reporting of 'F-11/F-12' results can be found in Appendix L and Appendix M respectively). Robson (2002:258) mentioned that, this process of analyzing open-ended question has the effect of turning the answers to a defined set of a standard response. Therefore, each negative/positive quote and insight

acquired from the participants represents an in-depth perspective, necessary to the complete understanding of how foreign faculty members are accessing and assessing the FFHP as well as the higher educational environment in Pakistan.

Aligned with the "Personal Motivation and Perceived Impact of FFHP" theme of the Web-SAQ, the *F-11 Question,* on *participants' expectation about FFHP,* elicited 31 responses making a total of 72% response rate. The participants recorded many **negative remarks** and majority of the respondents woefully complained about the non cooperative attitude of local faculty members at the host institution. One respondent commented by saying *"Yes, FFHP is excellent; but university politics makes it difficult to develop systems"* [7209394].[65] Another commented, *"My expectations did not come true due to non cooperative attitude of host institutes and feeling of autonomous body by host universities"* [7218974]. Another respondent stated, *"…there is no collaboration between the local professor and foreign professor at all"* [7208878]. Another one stated, *"I expect some improvement in higher education provided there is more cooperation between host institution and HEC"* [7235707].

Respondents further replied addressing their involvement with local academic community by saying, *"The recommendations of foreign faculties to improve teaching and research should be taken seriously by the host institutions"* [7218612]. Another noted, *"The support of higher ups in the ladder of system has been extremely positive while others at comparable level e.g. local faculty, etc has been very negative and at times even obstructive"* [7218957]. Adding to this sentiment, several replied, *"[My] expectations were high, reality is somewhat different"* [7852363]*, "the full potential of FPs [foreign professors] is not being utilized and their input in curriculum improvement is totally ignored and they are left at the mercy of the old system"* [7266523], and *"By considering people on FFHP as "Temporary" the host institutions don't take them as seriously as their "permanent" counterparts"* [7237256].

One respondent emphatically stated, *"I expected to teach […] students and supervise research in this field but I was asked to teach […], a subject which I have never studied in my life"* [7267340].[66] Without addressing the negativity or positive outcome, one respondent stated, *"A small % of FF [foreign faculty] will try to achieve while others are only passing*

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[65] All statements include a Unique ID number or Respondent Code, which can be traced in Appendix L and M.
[66] Emphasis added "to protect" the identity of the confidential informant.

time" [7482897]. Finally, one respondent stated that *"Facilities remain the biggest problem"* and, by giving a personal example, further stated, *"…in my case for first 10 months there was no place to sit and no one bothered"* [7678128].

Out of the many negative responses, several respondents gave **some positive statements** regarding their expectations about FFHP. Among them, two participants commented:

> *"FFHP is a very good program. It has contributed in creating an environment of research. It is also very important that HEC has started an equivalent program "Tenure Track"* [67] *for the local faculty for long term benefits"* [7994627],

and

> *"FFHP program might be very important instrument for implementing modern educational and research program in local academic community with some significant changes"* [7209280].

Several others stated that FFHP was well organized and upto their expectation by saying, *"It's a good programme…I am personally very happy, have been welcomed and helped by my colleagues and the institute"* [7218566], *"I think FFHP is doing only good things for Pakistan"* [7273426], *"I expect local institution to try to substitute FFM [foreign faculty Members] with local faculty members in 5 years"* [7967952], and *"Expectations were to improve my skills and knowledge which has been helped by joining FFHP"* [7358923]. At last, there were four other positive comments from respondents addressing the role of HEC and the FFHP scheme. These were, *"HEC played a role in bringing highly skilled people back to the country which were desperately needed, so far it [FFHP] has come up to my expectations"* [8234433], *"It is a very good idea to bring qualified people in the form of FFHP, however, it can be planned better by HEC"* [7601684], *"[I] was extremely satisfied with the ease in which my case was approved"* [7601202] and *"[FFHP] will succeed provided continuation"* [7700289].

Aligned with the "Personal Motivation and Perceived Impact of FFHP" theme of the Web-SAQ, the **F-12 Question***, on the suggestions regarding further improvements,* received a total of 34 comments making an overall 79% response rate. Participants had again recorded many

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[67] In 2003, HEC introduced the Tenure Track System (TTS) in public Universities and DAI's, which recommends that in-service quality teachers should be recruited on high salaries based on their performance. More information: www.hec.gov.pk/QualityAssurance/QA_Agency/Tenure_Track.htm

negative comments and lamented the lack of academic freedom and the need for triangular interaction between the university/institutions, HEC and foreign faculty members. One responded gave strong suggestions on further improvement of FFHP and structural policy amendments of local administrative and fiscal laws, by commenting that,

1. *Investing millions into FFHP yet leaving the entire program hostage to operational and administrative structure as it prevails is detrimental to the basic objective of the scheme.*

2. *A parallel Foreign Administrator/Policy Maker hiring program shall go a long way in achieving the far reaching goals of the FFHP.*

3. *Fiscal, administrative and managerial autonomy at all levels of hierarchy in the academic and research domain is immediately needed, and*

4. *There is a wrong emphasis on "Science and Technology" which leaves an extremely important, sensitive and paying area related to Art, Architecture and Design* [7218957].

Adding to this, another participant commented that there must be,

1. *Interview for the foreign professor with high qualified committee.*

2. *Research interest and also the finance support must be separate from the program of the university* [7208878].

Another respondent added that, *"All institutes and universities hosting foreign faculties must follow a code of conduct and be governed by HEC regulations, regarding FFHP"* [7218974]. Others spoke of the need to *"Train local faculty"* [7602918] in order to maintain goodwill within the workplace *"with each other and with other foreign faculty members"* [7967952] because majority of the participants have agreed that at the host institution *"foreign and local faculty do not know each other well"* [7273426]. One participant wrote, *"It is too political atmosphere in most of the Universities and FPs [foreign professors] feels always as outsider"* [7601684]. Still others complained about the lack of *"facilities and support system"* [7235707] as well as *"research funding"* [7482897]. Comments were also made about the need for improvement in the *"research environment"* [7781878], *"teaching methodologies"* [7218566], *"curriculum development"* [8234433] and *"undergraduate and postgraduate teaching programs"* [7601202]. One participant bemoaned about the necessity to establish a research culture in the Pakistani academic institution and writes, *"Most of the academic staff are still relying on centuries old 'notes system' rather than encouraging students to utilize library and internet facilities"* [7601202].

Another participant wrote,

> *I suggest giving care to undergraduate studies by offering better quality education through well qualified teachers. This should go hand in hand with continuous improvement of administrative systems* [7207982].

Perhaps this suggestion from one of the respondent sums it up best:

> *If foreign faculties are supported and helped financially to establish model laboratories/centers/institutes, just like the ones they were working in abroad, it will certainly optimize the utilization of foreign faculties to the country* [7236439].

The data presented in this chapter is the essence of the 30 close/open-ended questions gathered via Web-SAQ, which yielded a range of facts and opinions from different vantage points. The analysis of empirical data also revealed various issues of concern that helped to understand the experiences, challenges, problems and perceptions of the foreign faculty members currently employed in twenty one (21) public universities and DAI's of Pakistan. However, the analysis of Web-SAQ is not presented or intended as absolute values or universally applicable statements, but it does represent the opinion and views of the specialist respondents from various fields of higher education around the world. The next chapter presents the synthesis of the findings and deals with the conclusion of this research study. Based on this discussion, the researcher has made some recommendations and drawn well grounded suggestions, which may be of interest to general readers as well as higher education researchers for further study.

6   SYNTHESIS, CONCLUSIONS AND RECOMMENDATIONS

In the previous chapter, six themes of the Web-SAQ and the analysis of empirical data were presented. This chapter provides synthesis of the findings in the same order as the preceding chapter. It also functions as conclusions of the thesis in concert with the following research question, which guided this case study investigation: "*What are the reasons for foreign faculty members in joining the FFHP in Pakistan and how they feel about working in the domestic higher education environment?*" Finally, the overall discussion of this chapter focuses on the recommendations and suggestions for future research.

6.1 Synthesis of the Findings

The Web-SAQ was sent to 145 foreign faculty members, which finally received a total of 43 replies making an overall 30% response rate. The participants who responded were both male and female with the average age of 53.20 years, representing 12 different countries and 5 continents of the world. As male participants were dominating, there was no gender equality in this study and, thus, a proper gender perspective could not be comprehended in the analysis. From this research, it has been found that majority of the participants were expatriate Pakistanis, having dual citizenship, whereas the remaining one-fourth foreign nationals came from Europe, Africa and Asia. All the respondents hold a doctorate degree from Europe, North America, Australia and Asia, in various specialized areas. All these participants were maintaining permanent posts in academia and industry in their parent institution abroad before joining FFHP. However, it has been found that only few were working in academic/professional fields that were not much similar with their formal degree.

At present, nearly all of the participants are working with a status of 'Foreign Professor' (FP-I, II, & III)[68] in 21 public higher education institutions of Pakistan and have joined the FFHP during the years 2004 to 2008. It is worth to state that, since 2003, the FFHP project has been particularly controversial with accusations that those who have been recruited are unsuitable, oftentimes cannot speak English and are not active in research (Neelakantan 2007). However, the empirical study has identified that this is not the case as almost all the participants are

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[68] As a policy matter, according to HEC, all selected applicants shall assume the title of *"Foreign Professor"* to avoid administrative ambiguities. See Table 2 in Chapter 3, section 3.9

well experienced researcher/teachers in their respective fields and highly qualified as majority of them have earned their doctorate level degrees from English speaking countries.

The finding of this research also indicates that most of the *participants' receptiveness was towards research*, and nearly all participants are supervising graduate research candidates. Similarly, with respect to research output, majority of the respondents have stated that they have published between one to five research papers and/or articles with a total mean of 1.88. Unfortunately, many respondents pointed out that their level of satisfaction, with regard to institutional facilities, was not high and numerous have expressed feelings of unhappiness or stress about available departmental facilities, resources, and personnel matters whereas others restricted to remain neutral in their response. Similarly, quite a number of respondents seemed to be unsatisfied with the teaching and research quality/ability of local faculty members. However, they do believe that since their joining there has been much improvement in the overall working conditions of the host institutions and nearly all the respondents felt that the students and/or researchers have benefited from their experience.

Most importantly, the findings of this study indicated that *reversing 'brain-drain'* and *"exercising research"* were the main reasons of foreign faculty for making their decision in joining the FFHP. The respondents also think that the impact of FFHP on teaching/research as well as on the efficiency of local faculty has been highly effective and positive. In this regard, almost all the respondents have confirmed that FFHP has played an important role in improving the overall quality of educational programs and services of higher education institutions. However, *only* few have reported the level of satisfaction among local faculty related to FFHP as 'high', while others feel that majority of their local counterparts felt *less* secure within their presence due to their international research/teaching experience, foreign status/qualification as well as differing nationality.

Accordingly, majority of the respondents predicted the lack of internal faculty support to be one of the major aspects that might become a future problematic area for the implementation of FFHP related policy. They also pointed out towards scarce financial resource and inadequate national and institutional regulations which can also create obstacles in the future. Differences in attitudes and perceptions have also been identified among the foreign and local faculty members with regard to administrative affairs, institutional support, resources and

assessment. Majority of the respondents emphatically expressed their concerns relating to university politics and bureaucratic regulatory structure, and as such they have a great deal to cope with from an emotional point of view. Besides, many respondents have mentioned stress and pressure associated with the teaching and research work; however, still the overall satisfaction level with regard to their current job as well as FFHP project was reported as "high", and almost all positively stated that FFHP can play "important" role in reversing the brain-drain. Given the fair chance of a secure job, about half of the respondents were willing to serve as a "permanent" faculty at the host university/institution after the completion of FFHP contract.

In short, all the participants of this research have openly expressed both negative and positive viewpoints although many of these comments also clarify issues and give insights on how the foreign faculty members, as a whole, perceive their domestic environment. The synthesis of the findings also reveals that these respondents have expressed a mixed perception about the HEC and FFHP. They have also explicitly referred to the lack of communication and commitment on the part of the host institutions and the HEC management and expect them to clarify the code of conduct, their duties and responsibilities in order to support them while reassuring all the foreign faculty members that they are highly valued in Pakistan.

6.2   Conclusive Remarks

In a nutshell, this study has explored the strengths and weaknesses of Foreign Faculty Hiring Program (FFHP) in Pakistan from the participant's perspective. It has disclosed the three-fold objectives of the study, presented in Chapter 1. *Firstly*, to identify what is the prime interest of foreign faculty members in joining the FFHP scheme. *Secondly*, to explore the expectations, experiences and problems faced by foreign faculty in Pakistani universities. *Thirdly*, to know how important a role these scholars play in reversing the brain-drain into brain-gain and what their suggestions are regarding the FFHP project. The Web-SAQ provided the insights needed to explore and understand all these issues. Besides, empirical investigation helped in demonstrating how foreign faculty members viewed themselves in an international role, how this international opportunity changed their perceptions, and how their present experience in Pakistan affected them in relation to making a brain-gain contribution to the higher education system in Pakistan. The Web-SAQ also helped to generate responses

on what types of challenges and problems the foreign faculty members faced within the host institutions.

Apart from this, the argument of this study was to reveal the fact that foreign faculty hiring does not appear to represent something *unique*. A review of documentations helped the researcher to support his argument by presenting a contextual framework in Chapter 2, during the 19th century India, while describing the pre-partition situation of higher education based on the Indian Muslim education system. Similarly, the post-partition history of higher education in Pakistan was presented in Chapter 3 to highlight the efforts of Higher Education Commission (HEC). The researcher also discussed the reform and expansion movement of Pakistani higher education since 2000, in the light of globalization and internationalization.

At the outset of this chapter, the research question for analysis was presented that formed the basis of this study. The conclusions reached, as synthesis of the findings, demonstrated that reversing *"brain-drain"* and *"exercising research"* were the main reasons for the majority of the foreign faculty members making their decision in joining the FFHP. This concludes as the ***major strength*** of the program, which also shows that the overall satisfaction level of foreign faculty members towards the FFHP project is high. However, with respect to their feelings regarding working in the domestic environment, foreign faculty members see themselves as "outsiders" and seemed very unhappy and/or unsatisfied with their interaction related to the local faculty, university administration and HEC management. Thus, the findings points to the effectiveness related to communication and interpersonal relationships, which is lacking, and the HEC need to be aware of the effectiveness of such interaction. This concludes as the ***major weakness*** of the FFHP, which should be given due weightage by the HEC. All in all, this research study shows that not all the foreign faculty members are happy. Many are frustrated because of the lack of basic infrastructure, facilities and the level of bureaucracy in the higher education institutions. Another issue is the unwelcoming, even hostile attitude of their local colleagues and the depressing political, economic and academic environment in Pakistan (Mehdi 2005:8). Based on the collective experiences of the respondents, it can be contended that foreign faculty members are somehow becoming de-motivated, as their level of commitment and loyalty to the host institution has decreased, because of the high level of

insecurity experienced and the HEC should address such issues. Whether this is caused due to discrimination or whether it is their apprehension is also a question requiring further research.

6.3 Recommendations

Taking the perceptions of respondents into account, as exhibited in Chapter 5, a number of recommendations have been identified as a result of this research. These recommendations, not given in any particular order or preference, will be fed back to higher education institutions and the HEC to assist in future planning and evaluation of FFHP and other combined programs within or outside the university environment.

It is, therefore, recommended that the HEC should clarify the purpose of the FFHP project to the local faculty and particularly describe the positive effects that foreign faculty may bring to the host institutions and to the students that they are responsible to satisfy. The HEC officials must periodically communicate with the foreign faculty members, with the particular aim of assessing their problems within the domestic environment. This would serve to strengthen and encourage the support systems that are needed by the foreign faculty. In this regard, HEC shall also ensure that foreign faculty together with local faculty should attend compulsory workshops or seminars, which focus on "how to" interact with individuals from different countries/cultural backgrounds. Such events should be aimed to encourage a culture of understanding, tolerance, personal warmth and openness for academics whose backgrounds and life experiences are different from the host institution. This would even help in addressing the challenge of providing adequate orientation programs and services for foreign faculty members. For this purpose, a support group must be established for new academics deputed at higher education institutions in Pakistan.

Additionally, to enhance the support systems, HEC needs to pay greater attention to the quality and capacities of support services. Besides, the higher education institutions with the collaboration of HEC should also establish and review regularly the institutional policy on Internationalization to ensure that it remains up to date with the demands of internationalization and the pressures of globalization. Such higher education institutional policy should also accommodate the special needs of foreign faculty members in terms of orientation and support issues as mentioned earlier. Working environment should also be

improved and local faculty must adapt to the modern working life in order to facilitate the tasks of foreign faculty in an endeavor to enhance their confidence in the host institution. In-service training to administrative and technical staff must be provided for short/long term, either in Pakistan or abroad, to enhance their capabilities for more effective management and administration in order to serve the needs of foreign faculty. A parallel foreign administrator and/or policy maker hiring program should be launched in order to achieve the far reaching goals of the ongoing FFHP project. Finally, for FFHP *(being a developing hiring program)* there is a dire need for a knowledge-base documenting the experiences of the foreign faculty members in Pakistan. Therefore, higher education institutions are in need of such a knowledge-base in order to provide insights into the problems faced by the foreign faculty members and the means which are available for addressing these difficulties. In this regard, a more comprehensive approach to evaluation of the FFHP project on the part of the HEC is urgently required.

6.4   Suggestions for Further Research

Since little has been written or explored about the affective experiences of foreign faculty in Pakistan and/or FFHP project, there is much need for expanded research. In this respect, this particular study spawned multiple opportunities for future research. The researcher presents the following insightful issues that emerged from this research:

More in-depth comparative case study research, using mixed methodology, should be conducted to compare the FFHP with similar other ongoing programs around the world (for instance: FiDiPro)[69] in order to assess the fertility of their model and to develop the cause and effect of FFHP. Using similar reasoning, as when comparing such global hiring programs of the same nature, it would be worthwhile to investigate commonalities and differences in the working culture between different higher education institutions of Pakistan. It is also relevant to explore to what extent foreign faculty members have made an impact on the public and/or private host institution in terms of curriculum, course content, teaching and research. This impact may be further explored by paying attention to changes in the attitudes and/or perceptions of local faculty as well as research students and, thus, gains in extensive inter-cultural knowledge and understanding.

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[69] Finland Distinguished Professor Programme: www.FiDiPro.fi/eng/

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APPENDICES

Appendix A - Chronology of Major Efforts for Educational Reform

- November 1947: All-Pakistan Education Conference in Karachi.
- December 4, 1951: Approval of the First Six-Year Education Plan in Karachi.
- September 9, 1949: Formulation of the Commercial Education Committee.
- January 2, 1954: Report submitted by the Commercial Education Committee; written by Mr. Zahid Hussain, the first Governor of the State Bank of Pakistan; this report highlighted major problems in clear terms.
- May 26, 1955: The Lahore Education Board (LEB) recommended education reforms up to higher secondary level.
- 1956: Planning for the first Five-Year Plan.
- March 30, 1957: LEB's recommendation approved.
- January 3, 1957: The provincial government of East Pakistan formed Education Commission for Education Sector Reforms (ESR).
- July 1957: ESR Commission presented its report.
- 1959: Gen Ayub Khan set up a National Education Commission headed by Mr. S. M. Sharif under the Martial Law regime.
- December 1964: The government established Student Welfare Commission
- 1966: SWC submitted its first report.
- 1969: Gen Yahya Khan's martial law regime formed a committee that presented far-reaching reform measures for the education system.
- 1972: President Zulfikar Ali Bhutto convened a conference of teachers, intellectuals and students for finalizing an education policy.
- October 1977: Chief Martial Law Administrator, Gen Zia-ul-Haq, expressed his resolve for the Islamization of the education system in the National Education Conference.
- 1979: The interim government of Gen Zia's Pakistan National Alliance (PNA) formulated an education policy.
- 1983: The Martial Law regime prepared a Five-Year Education Action Plan.
- 1988–1995: The World Bank presented 13 reports for introducing basic changes in Pakistan's education system, especially for increasing the role of the private sector and restricting the government sector's role.
- 1988–1995: The Asian Development Bank prepared 3 reports.
- 1989: The Pakistan People's Party's government organized a National Education Conference.
- 1992: The Prime Minister Nawaz Sharif's government presented 10-year (1992–2002) Education Policy.
- 1998: The Prime Minister Nawaz Sharif's government presented its Education Policy.
- 1999: Introduced a fragmented education reforms policy proposing basic changes in syllabi, fee structure and teacher-training etc.
- 2001: The reforms were reviewed on the basis of a report submitted by the Higher Education Commission.
- 2001: The government empowered the Higher Education Commission for further reforms in higher education.

Source: Khalid & Khan (2006:322)

Appendix B - Core Strategic and Physical Targets of HEC-MTDF Proposed 5-year Plan

Core Strategic Targets	Physical targets
Faculty Development	• The percentage of faculty members in Universities and Degree Awarding Institutions having Ph.D. degree is to be increased to 40% in 5 years, and thereafter a 10% per annum increase in percentage should occur yearly. • 100% of the faculty should have undergone 1 – 3 month training courses emphasizing pedagogical skills, communications skills and information technology usage skills
Improving access	• Enhance enrollment in Universities and Degree Awarding Institutions to 500,000 in five years, excluding distance education programs. • Enhance enrollment to 1,000,000 students in distance education programs. • Ensure that any student obtaining admission on merit is able to obtain higher education regardless of his/her financial condition
Improving excellence in learning and research	• Increase the total number of people in Pakistan involved with Research and Development in Science and Engineering from the current level of 69 people / million to 300 people/ million. • Increase production of Indigenous Ph.D.s inside the country to 1,500 per year. • Introduce Ph.D. programs in at least 50% of the departments in Universities and Degree Awarding Institutions. • Have a 40% per annum growth in the number of International publications of faculty members. • Have a 25% per annum growth in External Research grants won by Institutions from sources other than Government sources
Ensuring relevance to economy	• Establish 10 Technology Incubation Parks • Enhance patent applications from Engineering Universities to at least 20 per year per Institution • Enhance the number of joint University-Industry projects being undertaken at Universities to at least 5 per Institution • Entrepreneurship courses to be included in all Engineering programs as well as Science and Technology advanced programs

Core Strategic Aims/Targets and Cross Cutting Supporting Aims
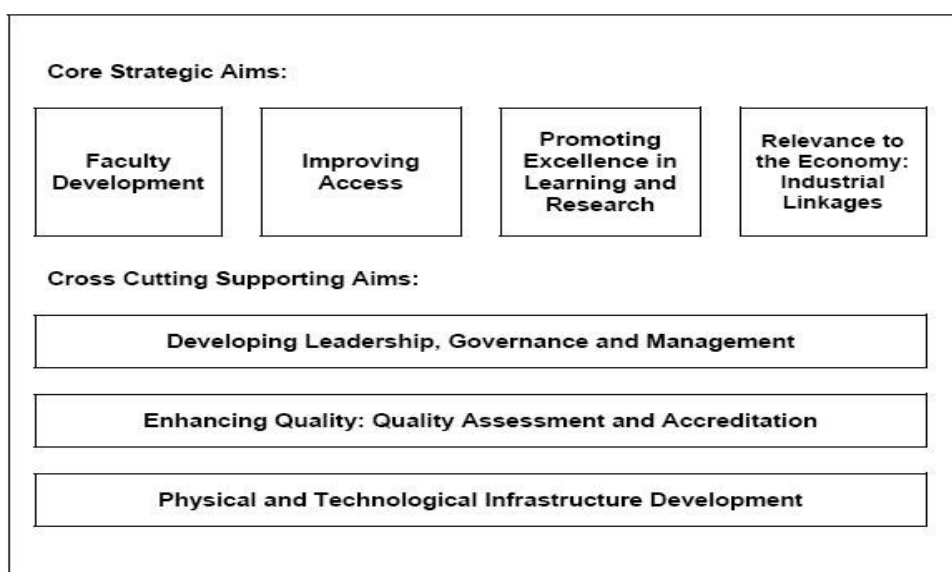
Source: MoF, Economic Survey 2005-2006 (p.168) & HEC-MTDF 2005-10 (p.18)

Appendix C - Growth of Universities/DAIs (1947-48 to 2004-05)
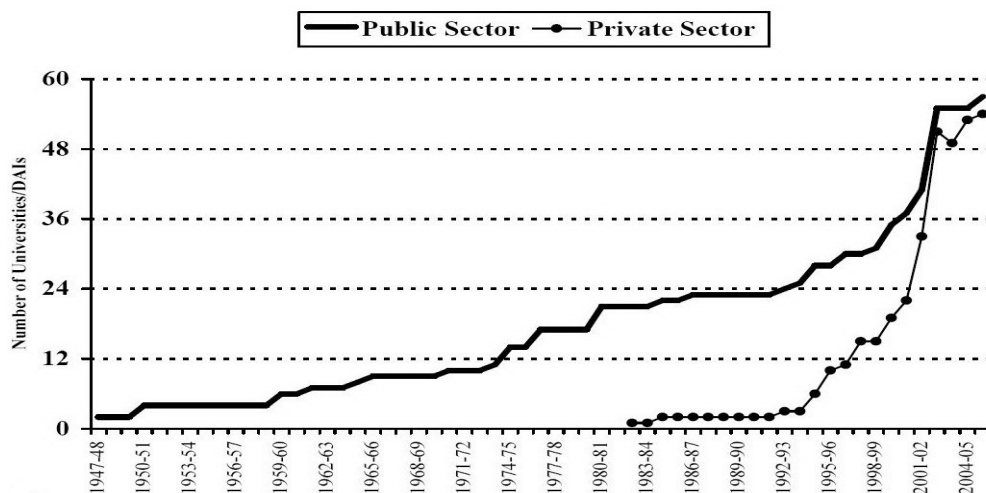
Number of Universities/DAIs in Public & Private Sector
Since 1947-48 to 2005-06

Year	Universities				Degree Awarding Institutions (DAIs)			
	Public		Private		Public		Private	
	TOTAL	Female	TOTAL	Female	TOTAL	Female	TOTAL	Female
1947-48	2	-	0	-	0	-	0	-
1959-60	5	-	0	-	1	-	0	-
1965-66	7	-	0	-	2	-	0	-
1975-76	12	-	0	-	2	-	0	-
1985-86	19	-	2	-	3	-	0	-
1995-96	25	-	7	-	3	-	3	-
1997-98	27	-	10	1	3	-	5	-
1998-99	28	1	10	1	3	-	5	-
1999-00	31	2	13	1	4	-	6	-
2000-01	32	2	14	1	5	-	8	-
2001-02	36	2	20	1	5	-	13	-
2002-03	45	2	31	1	7	1	13	-
2003-04	47	3	34	1	8	1	17	-
2004-05*	47	3	32	1	8	1	17	-
2004-05	47	3	34	1	8	1	19	-
2005-06**	49	4	36	1	8	1	18	-

* Two universities withdrawn from HEC list, due to lack of physical, financial and academic infrastructure.
** One Institute upgraded to University in 2005 & one College for Women shifted from Public to Private sector.
*** During the Financial Year 2005-2006, three new universities and two DAI were also established.

Source: HEC-Annual Report 2004-05 (pp. 40-41) *** HEC-Annual Report 2005-06 (p. 55)

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Appendix D- Fragmentation and Segmentation of Education System

LEVEL	MADARSAH SYSTEM	MODERN SCHOOL SYSTEM

PRIMARY

Madarsah: Regular — Fundamentalists

Modern School: English Medium — Urdu Medium

Private — Public — Public

SECONDARY

Darul Uloom

O, A levels Cambridge

HSC/Matric → Technical & Vocational

HIGHER/ NATIONAL

Islamic Studies faculties at the public Universities

Private Universities, Colleges

Public Universities/ Colleges

Centers of Excellence AKU, LUMS, GIK

Medical Eng: — Arts & Humanities — Sciences

HIGHER/ OVERSEAS

Top Universities in The World

Source: Hussain 2005:14

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Appendix E- Ranking Criteria for Universities in Pakistan *(League Table)*

Sr.#	Name of Fields	Score
1	**STUDENT**	**17**
1.1	Student produced having 16 years of education	2
1.2	Student produced having M.Phil/16 + years of education	3
1.3	Number of Ph.D. Produced.	4
1.4	Student Selectivity	5
1.5	% of students getting admission having 60% and above marks	3
2	**FACILITIES**	**15**
2.1	Number of Books in Main Library	2
2.2	Number of Books / Student	2
2.3	Number of Journals Subscribed in the Main Library	1
2.4	Number of Computers for Students per Student.	1
2.5	Number of Computers for Faculty per Faculty.	1
2.6	Bandwidth per Student	2
2.7	Labs for Practical	2
2.8	Number of Teams Participating in Inter University Games	1
2.9	Ranking of University in Inter University Games	1
2.10	Equipment Costing >2 million	2
3	**FINANCES**	**15**
3.1	Amount Generated through Own Sources	2
3.2	Amount Spent on Library + Research as % of Total Budget	4
3.3	Recurring Expenditure / Student	5
3.4	Non-Recurring Expenditure/ Student	4
4	**FACULTY**	**27**
4.1	Full Time Ph.D. Faculty	3
4.2	Ratio of Ph.D. Faculty to Total Faculty	9
4.3	Full Time Faculty having M.Phil/16 + years of Education	2
4.4	National & International Awards won by Faculty	2
4.5	Student Teacher Ratio	5
4.6	Trainings received by Faculty	2
4.7	Amount of Funds obtained through Competitive Grants for Research Projects/Faculty	4
5	**RESEARCH**	**26**
5.1	Number of Research Papers Published by the Faculty Members & Students during 2001-02, 2002-03 and 2003-04	4
5.2	Research Papers / Faculty	3
5.3	Number of Journals Published by the University	1
5.4	Number of Books Published by the Faculty Members	1
5.5	Number of Papers Presented and Published at Refereed International Conferences by Faculty Members and Students.	1
5.6	Number of Papers Presented and Published at Refereed National Conferences by Faculty Members and Students.	1
5.7	Gross Score Point of all Faculty Members as Determined by PCST	2
5.8	Gross Score Point/Faculty Member	2
5.9	University Organized Conferences/Symposia/Seminars/Workshops at National Level Sponsored by other Agencies	1
5.10	University Organized Conferences/Symposia/Seminars/Workshops at International Level Sponsored by other Agencies	2
5.11	Number of Patent Designs/Formula/Approved Varieties	2
5.12	Number of International Collaborative Research Projects	3
5.13	M. Phil. Produced /Faculty	1
5.14	Ph.D. Produced /Faculty	2
	TOTAL MARKS	**100**

Source: HEC-QA (2006)

Appendix F - Flow Chart for Minimum Criteria
(M.Phil and PhD Education)

```
┌──────────────────────────────────┐      ┌──────────────────────────────────┐
│ Minimum 16 years of schooling /   │      │ M. Phil / M.S / Equivalent / 18   │
│      130 credit hours             │      │  Years of Schooling / GDA > 3.0   │
└──────────────────────────────────┘      └──────────────────────────────────┘
                                   │
                    ┌──────────────────────────────────┐
                    │      GRE Type Test (NTS)          │
  ┌──────────────┐  └──────────────────────────────────┘
  │ TERMINAL     │  ┌──────────────────────────────────┐
  │ DEGREE       │  │ 30 Credit Hours Minimum 24 credit │
  │ M.Sc. /      │  │      hours course work            │
  │ M. Phil      │  └──────────────────────────────────┘
  │ Equivalent   │
  │ subject to   │           ◇ * GPA> 3.00 /            ◇
  │ fulfillment  │           ◇   1st Division           ◇
  │ of other     │
  │ requirements │   ┌──────────┐       NO        YES
  │ of the       │   │ Allowed  │
  │ degree.      │   │ to       │
  └──────────────┘   │ improve  │
                     │ GPA as   │   ┌──────────────────────────────────┐
                     │ per      │   │ ** Subject Comprehension Test     │
                     │ univ.    │   │      Subject GRE (Int.)           │
                     │ policy   │   └──────────────────────────────────┘
                     └──────────┘   ┌──────────────────────────────────┐
                                    │ Additional coursework of PhD level│
                                    │      Min. 18 Credit Hours         │
                                    └──────────────────────────────────┘
                                    ┌──────────────────────────────────┐
                                    │      Comprehensive Exam           │
                                    └──────────────────────────────────┘

                                            ◇   Success   ◇
                              NO                          YES

                                    ┌──────────────────────────────────┐
                                    │      Research Proposal            │
                                    └──────────────────────────────────┘
                                    ┌──────────────────────────────────┐
                                    │      PhD Candidacy                │
                                    └──────────────────────────────────┘
                                    ┌──────────────────────────────────┐
                                    │ **** Paper accepted in HEC        │
                                    │      Approved journals            │
                                    └──────────────────────────────────┘
                                    ┌──────────────────────────────────┐
                                    │ *** Dissertation Evaluation       │
                                    │ (By two Foreign Experts)          │
                                    └──────────────────────────────────┘
                                    ┌──────────────────────────────────┐
                                    │      Dissertation Defense         │
                                    └──────────────────────────────────┘
                                    ┌──────────────────────────────────┐
                                    │              PhD                  │
                                    └──────────────────────────────────┘
                                    ┌──────────────────────────────────┐
                                    │ Submission of Dissertation copy   │
                                    │           to HEC                  │
                                    └──────────────────────────────────┘
```

* Top 25 % of the coaching class for those subjects in which 1st division is not common like literature etc., final decision will be taken by the university.

** Subject GRE test if not available will be developed

*** Will apply to PhD students in the pipeline as well.

**** Students already admitted in a PhD. Program, will require acceptance of one paper in HEC approved journals.

NOTE: These are Minimum Requirements.

Source: HEC-QA Division, Policies and Decisions-2006

Appendix G - Discipline-wise Demand of Public Sector Universities for Foreign Faculty Received by HEC
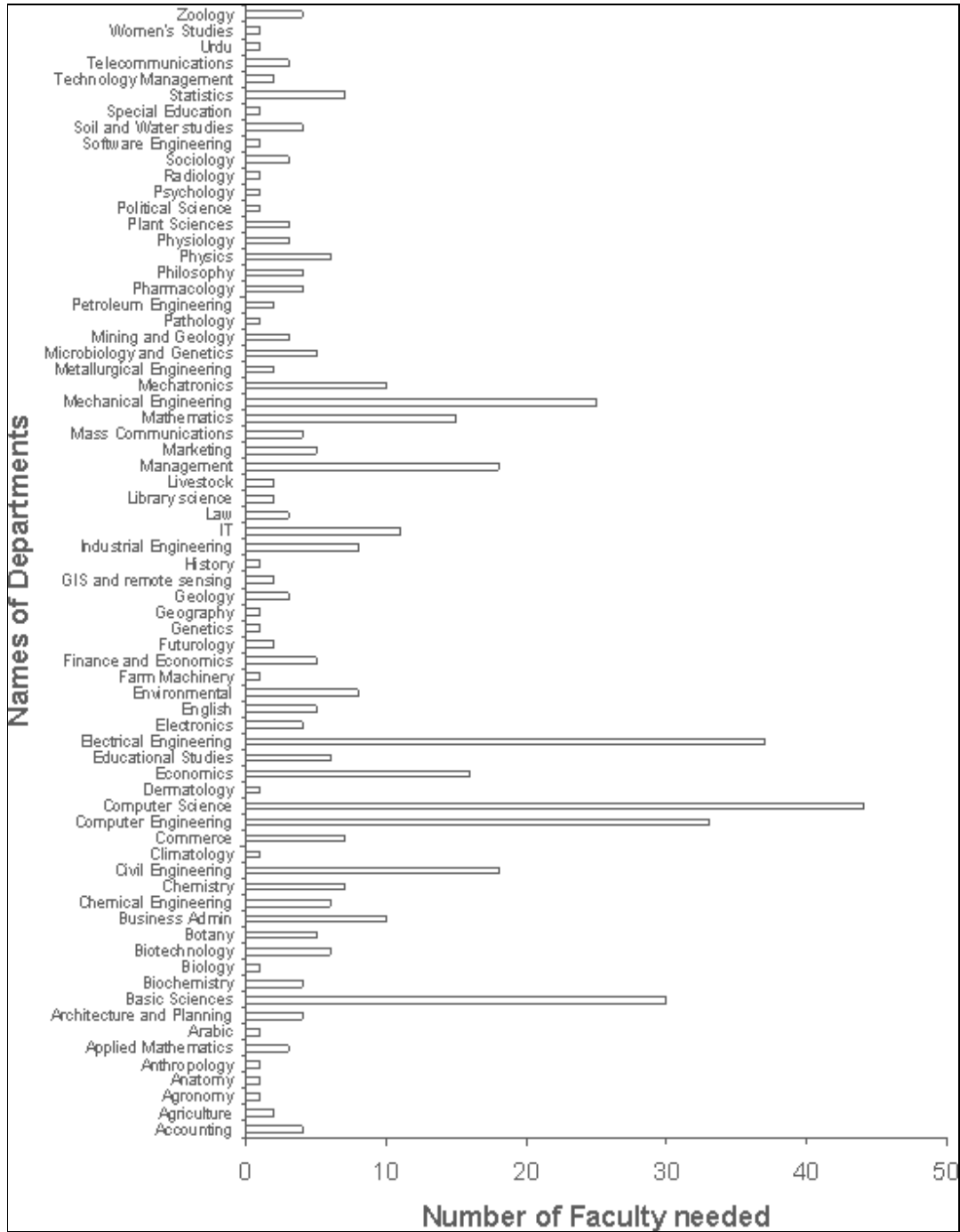
Source: HEC Website

Appendix H - Terms & Conditions for Recruitment of Foreign Faculty

SN	TERM	CONDITION / DUTIES
1	Teaching Load	Minimum 1 course (3 credit hours per semester) or maximum up to 2 Courses (6 credit hours per semester)
2	Research Load	To carry out research in their area of expertise / as per requirement of the host institution.
3	Publication / Papers	At least one refereed research paper per year
4	Supervisor	Supervise the Graduate students of Masters and Doctorate level
5	Evaluation / Progress Report.	A quarterly performance report shall be sent to the HEC on a Progress Report Performa
6	Extension of Contract	Extension of Contract will be initiated by host Institution based on further requirement of Foreign Professor and consent will be taken by Foreign Professor
7	Leave entitlement: Casual / Annual Medical Leave	4 Weeks / Year 15 Days
8	Medical Facility (Insurance etc.)	HEC-through Medical Insurance on payment of monthly premium as per health insurance policy.
9	Other perks / facilities	Pick & drop may be provided through central transport system of host institution, if deemed necessary / availability of transport
10	Assignment to R & D work / consultancy on projects in other locations/	TA / DA admissible as per parent institution's rules
11	Utilization as temporary visiting faculty to other organizations / institutions	On mutual / exchange program (of parent institution and / or host institution)
12	Right of private practice	Subject to approval of the host institution
13	Project / R & D	To acquire projects from outside – agencies (local / abroad) profit sharing as per host institution approved formula
14	Status / seniority of Foreign Professor	As per HEC policy
15	Non-performance of specific duty	Monetary penalty (to the extent of partial / full day salary) Penalty for habitual absence without leave

Source: FFHP, Higher Education Commission (HEC) Government of Pakistan

Appendix I - Email Cover Letter (Web-SAQ)

From,
The Higher Education Group (HEG)
Department of Management Studies
33014 University of Tampere
FINLAND

Dear [%%First Name%%],

I am a European Commission Graduate student enrolled in a joint two-year mobility program on changing functions, policies, and operations of higher education in a comparative perspective. The European Master in Higher Education (HEEM) program is offered by three Universities in Europe and is part of the Erasmus Mundus Program. I am currently at the University of Tampere, Finland and working towards my Masters thesis concerning the motivation of Foreign Faculty members in joining Pakistani Universities.

I have been granted permission by Higher Education Commission (HEC) authorities to conduct a survey on FFHP scheme. You have been selected to receive this web-based questionnaire because you are a member of Foreign Faculty who is currently working at this host institution. I realize, especially at this time of year, you face a vast workload. I would, however, greatly appreciate it if you would complete the online questionnaire, which will take only 15 to 20 minutes. Please note that this questionnaire may be completed within 15 days of receiving this email.

The questionnaire provides information that will assist the researcher in a number of ways, such as: 1) it will help in constructing the data that will identify your motivation to join FFHP; 2) it will provide enough information about your academic and demographic conditions; and 3) it will permit a statistical description of the faculty in the graduate program with which you are affiliated in Pakistan. Your answers will be treated as completely confidential and will not be shared with any Foreign/domestic Faculty member, administrator of your department/program or the HEC officials. The study's results will only be used as part of a statistical analysis and data generated from this research will be reported only in the aggregate, which would be very helpful in conducting the research.

Upon completion of this thesis, I will be very happy to share the results of my study with you.

If you have any questions at any time about the questionnaire or the procedures, please do not hesitate to contact me by email at adnan.mughul@uta.fi. You may also contact the HEG Research Director Dr. Timo Aarrevaara at +358-3-3551-7559 (office) or by email at timo.aarrevaara@uta.fi for any questions you may have about your rights as a research subject.

Thank you very much for your time and support. To start the web-based questionnaire, please click this link: http://heem.ffhp.sgizmo.com

Sincerely,

MUGHUL, ADNAN MUHAMMAD

HEEM –Erasmus Mundus Cohort:
University of Oslo, NORWAY;
University of Tampere, FINLAND; and
University of Aveiro, PORTUGAL

HEDDA- http://uv.uio.no/hedda/
HEG- http://uta.fi/laitokset/jola/heg/

Appendix J –Presentation Letter from UTA, Finland

Johtamistieteiden laitos   **Department of Management Studies**
Tampereen yliopisto   **University of Tampere**

PRESENTATION LETTER

This is to introduce **Adnan Muhammad Mughul** (22.01.1972, Pakistan) who is a student enrolled in the two-year master programme, European Master in Higher Education (HEEM). The European Master Programme in Higher Education is offered jointly by the University of Tampere, Finland, the University of Oslo, Norway, and the University of Aveiro, Portugal. The language of education in the programme is English.

Mr. Mughul is currently studying at the University of Tampere, Finland and working on his master's thesis concerning the motivation of foreign faculty members in joining Pakistani Universities. His master's thesis is supervised by Research Director, Dr. Timo Aarrevaara. Mr. Mughul is collecting the empirical data of his research through a web based questionnaire. Your opinions will be a basis for research findings, and all answers will remain confidential and used for research purposes only. Your contribution to this research will be highly appreciated.

Tampere March19th 2008

Dr.Timo Aarrevaara   Professor Seppo Hölttä
Research Director   Head of Unit
Higher Education Group   Higher Education Group

Postiosoite: 33014 TAMPEREEN YLIOPISTO
Käyntiosoite: Kanslerinrinne 1, 33100 Tampere
Puh. Vaihde 358 3 3551 11 ♦ Fax. 358 3 3551 6020 ♦ Sähköposti: johtamistieteiden.laitos@uta.fi

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Appendix K - FFHP-Questionnaire

(Paper-based version of <u>Web-SAQ</u> for foreign faculty serving in Pakistani universities)

Please provide as much details about yourself in order to enable the researcher to interpret your FFHP biography as accurately as possible. Filling in the questionnaire takes about 15 - 20 minutes. Questions with this mark ***** are mandatory.

<u>NOTE: All your answers will be treated confidentially</u>

A. SOCIO-BIOGRAPHICAL DATA

A.1 Gender*

☐ Male   ☐ Female

A.2 Year of birth*

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A.3 Please provide the following information*

Citizenship/Place of birth:

A.4 What is your first language/mother tongue?

Please specify:

B. PROFESSIONAL BACKGROUND

B.1 Please provide the following information:*

a. Highest degree earned:
b. Institution that conferred highest degree:
c. Country in which you obtained:
d. Year of highest degree:
e. Area of specialization:

B.2 Please select your academic discipline or field of your degree:*

a	Agriculture & Veterinary Sciences	☐	**c**	Physical Sciences	☐	**e**	Business Education	☐	**g** Arts & Humanities ☐
b	Biological & Medical Sciences	☐	**d**	Engineering & Technology	☐	**f**	Social Sciences	☐	**h** Other ☐

If other, please specify: _____

B.3 To what extent does your field of research/teaching or professional activities **differ from** the field of your highest degree or area of specialization?

☐ Very similar   ☐ Similar   ☐ Somewhat similar   ☐Not very similar   ☐ Not at all similar

B.4 Please state your status prior to joining FFHP

☐ Faculty   ☐ Postdoc   ☐ Other
If other, please specify: _____

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C. CURRENT EMPLOYMENT

C.1 Please tick your current position/rank/job title:

Professor	☐	Associate Professor	☐	Assistant Professor	☐
Researcher	☐	Scientist	☐	Other	☐

If other, please specify: _____

C.1 Please list the name of the university and department/faculty that you have joined in Pakistan*

Name of University:

Department/Faculty:

C.2 Your year of joining at this host university/institution*

Year:

D. TEACHING AND RESEARCH PRODUCTIVITY

D.1 Does your interest lie primarily in teaching or in research?*

☐ Primary in teaching   ☐ Primarily in research

☐ In both, but leaning towards teaching   ☐ In both, but leaning towards research

D.2 Do you supervise any dissertations and/or serve on doctoral committees?

☐ Yes   ☐ No
If Yes, please specify the total number of candidates:

D.3 How many referred research papers you have published during your current job?

☐ Five   ☐ Four   ☐ Three   ☐ Two   ☐ One   ☐ Not applicable

E. Work Situation

E.1 At your host institution, how would you evaluate each of the following facilities, resources, or personnel?

Satisfied	Neutral	Unsatisfied	Not applicable	
☐	☐	☐	☐	Your own personal work space
☐	☐	☐	☐	Classrooms and/or auditoriums
☐	☐	☐	☐	Technology for teaching
☐	☐	☐	☐	Laboratories
☐	☐	☐	☐	Research equipment and instruments
☐	☐	☐	☐	Computer facilities
☐	☐	☐	☐	Telecommunications (internet/networks/phone)
☐	☐	☐	☐	Library facilities and services
☐	☐	☐	☐	Secretarial support
☐	☐	☐	☐	Teaching support staff
☐	☐	☐	☐	Research support staff
☐	☐	☐	☐	Research funding
☐	☐	☐	☐	Other facilities

E.2 How would you rate the overall quality of teaching and/or research by local faculty members at your host institution? *

☐ Excellent ☐ Vey good ☐ Good ☐ Fair ☐ Poor ☐ Not sure

E.3 In your views, since your joining, did the overall working condition has…*

☐ Greatly improved ☐Somewhat improved ☐Remained unchanged ☐Declined ☐Greatly declined ☐Not sure

E.4 Considering the overall environment of your host university/institute, how much do you feel your student/researchers have benefited from your experience? *

☐ Very much ☐ Somewhat ☐ Undecided ☐ Very little ☐ Not at all

F. PERSONAL MOTIVATION AND PERCEIVED IMPACT OF FFHP

F.1 Please indicate, why did you make the decision to join in the FFHP scheme? *

1. To give me an opportunity to contribute in reversing brain-drain	☐ Yes	☐ No
2. To give me a chance to exercise research and/or teaching	☐Yes	☐ No
3. To give me a social status and prestige at the host institution	☐ Yes	☐ No
4. To provide me with a chance to earn a better salary	☐ Yes	☐ No

F.2 In your view, the impact of FFHP on teaching/research effectiveness in your institution is...? *

☐ Very positive ☐ Positive ☐ Neutral ☐ Negative ☐ Very negative

F.3 In your view, the impact of FFHP on the efficiency of local faculty in your institution is...? *

☐ Very positive ☐ Positive ☐ Neutral ☐ Negative ☐ Very negative

F.4 In your view, the level of satisfaction among local faculty members with respect to their working conditions related to the FFHP is...? *

☐ Very high ☐ High ☐ Neutral ☐ Low ☐ Very low

F.5 In your view, is FFHP important for *improving* the overall quality of educational programs and services at your host university? *

☐ Very important ☐ Important ☐ Neutral ☐ Unimportant ☐ Very unimportant

F.6 Which of the following aspects do you predict will be problems confronting the implementation of FFHP-related policy in the coming years? (indicate as many as are relevant)

☐ Not enough financial resources

☐ Inadequate national regulations

☐ Not enough internal faculty support

☐ Inadequate institutional resources

☐ Other, please specify:

F.7 How would you rate your overall satisfaction with your current job at the host institution? *

☐ Very high ☐ High ☐ Neutral ☐ Low ☐ Very low

F.8 After spending such time at the host institution, how satisfied did you feel towards joining FFHP? *

☐ Very satisfied ☐ Satisfied ☐ Neutral ☐ Dissatisfied ☐ Very dissatisfied

F.9 How important in your view is the FFHP scheme useful for reversing the brain-drain into brain-gain? *

☐ Very important ☐ Important ☐ Neutral ☐ Unimportant ☐ Very unimportant

F.10 If provided the chance, to what extent would you consider in becoming a permanent faculty member after completion of your current FFHP contract? *

☐ Very much ☐ Somewhat ☐ Undecided ☐ Very little ☐ Not at all

F.11 Please state your expectation about FFHP and whether if it came true or not?

F.12 Please state, what kind of further improvements in the higher education system of Pakistan would you suggest according to your personal experiences?

---x---x---x---

FFHP-Web SAQ Link: http://heem.ffhp.sgizmo.com

Appendix L - Open-ended Question (F-11)

6.5 Appendix L - Open-ended Question (F-11)	
Please State Your Expectation About FFHP and Whether If It Came True or Not?	
CODE	**VALUE**
7884474	N/A
7207982	It came true but the success of FFHP depends as long as financial support is there.
7208878	There are many problems faced by the HEC program. First of all there is no collaboration between the local professor and foreign professor at all. It is my honor to mention that I managed as *[…]* at the "International conference on the *[…]*", for the first time in the history of *[…]*.[71] We must change the situation and invite the foreign professor with a target of research that may serve Pakistan's needs and support otherwise it could be a waste of time and money of the nation of Pakistan.
7209394	Yes, FFHP is excellent; but university politics makes it difficult to develop systems.
7209280	FFHP program might be very important instrument for implementation modern educational and research program in local academic community with some significant changes.
7218566	It's a good programme with the normal Pakistani hick-ups, but it needs time to succeed. I am personally vey happy, have been welcomed and helped by my colleagues and the institute, short-term stays of one or two years are not enough to change teaching and learning culture.
7218612	Foreign faculties under FFHP should be actively involved in the decision-making process of host institutions. The recommendations of the foreign faculties to improve teaching and research should be taken seriously by the host institutions.
7218974	My expectations did not come true due to non-cooperative attitude of host institutes and feeling of autonomous body by host universities.
7218957	I have had almost four very active, hectic, challenging, productive and fruitful years at my present position. I have been singularly responsible in instilling a new life into my professional domain - teaching and research of *[…]*[72] education. The support of higher

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[71] Emphasis added "to protect" the identity of the confidential informant.
[72] Ibid.

Please State Your Expectation About FFHP and Whether If It Came True or Not?

CODE	VALUE
	ups in the ladder of system has been extremely positive while others at comparable level e.g. local faculty, etc. has been very negative and at times even obstructive. I expected all this and had to negotiate in a creative manner to overcome problems and be able to deliver, which I have. But my views on improvement of FFHP is given in the next section (F12) which must be taken seriously even though it involves structural policy amendments of local administrative and fiscal laws.
7235707	I expect some improvement in higher education provided there is more cooperation between host institution and HEC.
7236439	I had given proposal to HEC higher authorities to establish *[…]*[73] in Pakistani Higher Education Institutions with foreign faculties only to enhance research activities and then merge them with the relevant host institutions after equilibration. But sadly it didn't happen.
7237256	I think that FFHP program should not be considered a "temporary" program. The idea should not be to get some faculty on a short time basis to enhance Pak teaching and research endeavors; rather, the aim should be to "lure" good faculty from abroad and keep them here for good, especially the faculty members with Pakistani origin. This is possible if there are some integration mechanisms that can be defined for faculty that may be interested in staying here for the long term. By considering people on FFHP as "temporary", the host institutions don't take them as seriously as their "permanent" counterparts. For example, there are more problems associated with getting doctoral students for research, or proper lab space, etc.
7262794	It has met my expectations HEC should have more free-quest round table discussions with small groups of FFHP.
7266523	In my opinion the full potential of FPs is not being utilized. Their input in curriculum improvement is totally ignored and they are left at the mercy of the old system.
7267141	True
7267340	I expected to teach *[...]* students and supervise research in this field but I was asked to

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[73] Emphasis added "to protect" the identity of the confidential informant.

Please State Your Expectation About FFHP and Whether If It Came True or Not?

CODE	VALUE
	teach *[…]*, a subject which I have never studied in my life. A FOREIGN FACULTY *[…]* and *[…]* were asked to teach *[…]* subject.[74] You can imagine the results of such teaching and research. FFHP is just a program started by Atta-ur-Rahman to show the President of Pakistan that he is reversing the brain-drain and to drain billions of dollars from the national exchequer. I have come to the conclusion that instead of wasting money of this extremely poor nation on FFHP, this money should be utilized for basic education as only small percent of Pakistanis can read and write.
7273426	I think FFHP is doing only good things for Pakistan.
7358923	Expectations were to improve my skills and knowledge which has been helped by joining FFHP.
7482897	A small % of FF will try to achieve while others are only passing time.
7601202	Was extremely satisfied with the ease in which my case was approved. HEC admin was quite efficient and prompt. I was able to deliver a quality teaching program for the undergraduate and postgraduate students.
7601684	It is a very good idea to bring qualified people in the form of FFHP; however, it can be planned better by HEC.
7602918	FFHP program is very well organized by the FFHP Coordinator and for this I wish to congratulate him and the Chairman for their personal attention to each foreign faculty.
7606325	Hard to comment at the moment.
7678128	Facilities remain the biggest problem. For example in my case for first 10 months there was no place to sit and no one bothered. Office facilities even today are far from satisfactory. No grants for books, publications, seminars. And many more, "Kahaan tak suno gay, kahan tak sunaain".
7700289	In-Shaa-ALLAH it will succeed provided continuation.

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[74] Ibid.

6.5 Appendix L - Open-ended Question (F-11)

Please State Your Expectation About FFHP and Whether If It Came True or Not?

CODE	VALUE
7702834	FFHP is really a very important program for the higher education in Pakistan and all I expect from it come true.
7738289	Came true
7852363	Expectations were high, but reality is somewhat different
7967952	I expect local institution to try to substitute FF with local faculty members in 5 years.
7994627	FFHP is a very good program. It has contributed in creating an environment of research. It is also very important that HEC has started an equivalent program "Tenure Track" system for the local faculty for long term benefits.
8234433	When I came back to Pakistan, I did not realize the state at which the education was at national level, HEC played a role in bringing highly skilled people back to the country which were desperately needed, so far it has come up to my expectations.

Appendix M - Open-ended Question (F-12)

6.6 Appendix M - Open-ended Question (F-12)	

Please State What Kind of Further Improvements in The Higher Education System of Pakistan Would You Suggest According to Your Personal Experiences?

CODE	VALUE
7884474	N/A
7207982	I suggest giving care to undergraduate studies by offering better quality education through well qualified teachers. This should go hand in hand with continuous improvement of administrative systems.
7208878	1. Interview for the foreign professor with high qualified committee. 2. Research interest and also the finance support must be separate from the program of the university such as Democratic and procreates.
7209394	Please note I have returned to the […] after a year, and my observations are based on one year spent from […].[75]
7209280	More fundamental and applicative research linked to teaching program. Much more academic responsibility of local scholars. Less political influence on academic community and educational program.
7218566	For improvement of research teaching load has to be reduced for local faculty, focus in education has to shift from teaching of facts to development of thought processes and analytical skills, teaching methodologies needs improvement (training for local faculty in between two semesters, teaching methodology, psychology) assessment of teachers by students be made mandatory, revision and adaption of curricula as an ongoing project so as to not allow the discussion to cease.
7218974	All institutes and universities hosting foreign faculties must follow a code of conduct and be governed by HEC regulations regarding FFHP.
7218612	FFHP should be further streamlined / harmonized with the local system of higher education. University's management should be effectively involved by the Higher Education Commission of Pakistan (HEC) to evolve FFHP.
7218957	1. Investing millions into FFHP yet leaving the entire program hostage to operational

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[75] Emphasis added "to protect" the identity of the confidential informant.

6.6 Appendix M - Open-ended Question (F-12)

Please State What Kind of Further Improvements in The Higher Education System of Pakistan Would You Suggest According to Your Personal Experiences?

CODE	VALUE

and administrative structure as it prevails is detrimental to the basic objective of the scheme. FF coming from a different and academically highly motivating systems find incapacitated due to the prevailing regulations. After all it does not make much economic and policy sense in terms of paying a FF millions in terms of salary and facilities yet holding him clutched by the local fiscal and administrative agents who invariably feel hostile simply on whimsical salary advantage whereas it is a simple fallacy. The HEC's TTS offers better economic package to local faculties with much lower academic and research standards than a FF possesses especially when the FF has no additional perks such as medical and other covers and their cost of living turns out to be much greater a proportion of what they are paid compared to their local counterparts. Moreover the "permanent" vs "temporary" or "contractee" plays into the hands of those who exploit it to the detriment of academic and research ambiance of institutions.

2. A parallel foreign administrator/policy maker hiring program shall go a long way in achieving the far reaching goals of the FFHP. Similarly, equal emphasis upon training the middle stage administrators is of paramount importance. Currently the FFHP can be best compared to an analogy where one decides to replace the old engine of an old car with a brand new high powered new engine leaving it at the mercy of old body and an aging chassis resulting in initial extraordinary thrust in speed while soon one finds the body parts and chassis is caving in, breaking down resulting complete collapse of the vehicle.

3. Fiscal, administrative and managerial autonomy at all levels of hierarchy in the academic and research domain is immediately needed.

4. A case in point is a small research project I have from the HEC. HEC pays me something of the order of […] million rupees and the entire research budget for the said project was less than […] million (for a period of […] months) but administrative and fiscal trivialities and idiosyncrasies wasted […][76] of these precious months in allowing purchase of the initial equipment for the project. During the process many of investigating team members got dejected and left leaving the project hanging precariously without much productivity. This example should be enough to justify what I have pointed out in the above lines.

5. I honestly believe that there is a wrong emphasis on "Science and Technology" which leaves an extremely important, sensitive and paying area related to Art, Architecture and Design. We can hardly compete in science and technology and we are able to do that it will require tremendous amount of financial and temporal resources to achieve what is aimed at than what can be achieved in academic, research

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[76] Emphasis added "to protect" the identity of the confidential informant.

Please State What Kind of Further Improvements in The Higher Education System of Pakistan Would You Suggest According to Your Personal Experiences?

CODE	VALUE
	and productivity level if we emphasize Art and Design as the value addition to our local art and craft industry requires much less investment and the return is much high. At the same time the time to achieve that is much shorter that for science and technology. In short what I am trying to say is that there is a need for a fuller debate on this and I am willing to take the initiative should the HEC give a go ahead. 6. There are many other issues that are linked to reversal of the decay in our academic institutions that need to be addressed but i must state here that FFHP is an excellent tool that can achieve this if it is applied and used judiciously and effectively.
7235707	Better library facilities and support system in computing.
7236439	If foreign faculties are supported and helped financially to establish model laboratories/centres/institutes just like the ones they were working in abroad, it will certainly optimize the utilization of foreign faculties to the country.
7237256	I see a proliferation of the term "university" being applied to less than mediocre institutes in the country with no faculty or facility. This is diluting the integrity, quality, and significance of this institution. There should be some rules governing the designation of an institution as a university. Thus, a basic criteria needs to be established to determine what a "university" can be, what minimum facilities / infrastructure / faculty strength / student population / administration / programs / academic standards, etc. it should have.
7262794	Greater interaction between HEC and FF.
7266523	FPs should be part of decision making committees regarding course structure/teaching. Their dependence on the current system of procurement should be eliminated. They should be able to order and receive chemicals/supplies without the tender system. The tender system is a big waste of time for FPs.
7267141	Capacity building of the staff and quality of in-take of the PhD students.
7267340	Atta-ur-Rahman and Sohail Naqvi should be removed as they have spoiled the FFHP. Foreign professors from reputed American universities should be appointed to implement FFHP.

6.6 Appendix M - Open-ended Question (F-12)

Please State What Kind of Further Improvements in The Higher Education System of Pakistan Would You Suggest According to Your Personal Experiences?

CODE	VALUE
7273426	We, foreign and local faculty do not know each other well. It should be in high level among HEC institutions too.
7358923	All universities should follow one system instead of spreading their curriculum over different aspects. HEC should have more interaction with foreign faculty professors.
7482897	For high standard teaching and research funding is very important. I must say for practically ZERO level of facilities in 2005, now I have improved to any good standard in any UK university.
7593997	HIGHER EDUCATION Commission has shown flexibility compared to other Pakistani institutions, yet it can use more of it and move away from bureaucracy. There is too much superstructure in the Administrative cadre; and there is too much waste of money in sending the administrative staff to USA and Europe to recruit. More effective and very economical channels can be used instead.
7601202	Based on my personal experience we need to eliminate military background administrators (VC, Registrar and other key admin staff). These guys have no idea how to enhance academic profile of an academic institution. There is an urgent need to set up high profile researcher's team to establish a research culture in the Pakistani academic institution. High performing researchers should form the research panel/directorate. Undergraduate and postgraduate teachings programs require major restructuring. Most of the academic staff are still relying on centuries old "notes system" rather than encouraging students to utilize library and internet facilities. Current teaching programs encourage cramming rather than analytical thinking and research work. Mode of teaching should be in ENGLISH. Assignments and project work should be based on real life problems and should be in collaboration with the potential employers.
7601684	It is too political atmosphere in most of the Universities and FP feels always as outsider.
7602918	More emphasis should be bringing experienced teachers who should be conducting several workshops on concept-based teaching to train local faculty.
7606325	Abolishment of red- tapism, more faculty development programs.

6.6 Appendix M - Open-ended Question (F-12)

Please State What Kind of Further Improvements in The Higher Education System of Pakistan Would You Suggest According to Your Personal Experiences?

CODE	VALUE
7678128	This needs thinking.
7700289	Giving more care to new generation, will help progress of Pakistan. This is by saving no effort to provide the educational system by highly qualified teachers.
7702572	Numerous!
7702834	To pay more attention towards research and teaching.
7738289	Liberal scholarships should be given at the secondary and college level to improve catchment area for higher education.
7781878	Improvement in the Research Environment.
7852363	Revise whole of system - learn from western countries
7967952	Local faculty member's way of thinking and dealing with each other and with other FF Members.
7994627	I think more people should be encouraged to do PhD in Pakistan. At present HEC offers so many scholarships for PhD abroad that only a few people are interested in doing PhD in Pakistan, which leaves FFHP with minimum number of people (leftovers) to consider for PhD programs.
8234433	1-Curriculum development. 2- More Universities are needed in the far flung areas of the country, education should be provided to all. 3-More research funding is required.

Words of Wisdom!

"The soft overcomes the hard.

The slow overcomes the fast.

Let your workings remain a mystery.

Just show people the results"

Tao Te Ching