

PAKISTAN: THE COMMONWEALTH SCHOLARSHIP AND FELLOWSHIP PLAN

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Acronyms

CEM	Commonwealth Education Meeting
CSC	Commonwealth Scholarship Commission
CSFP	Commonwealth Scholarship and Fellowship Plan
GOP	Government of Pakistan
GRE	Graduate Record Examination
HEC	Higher Education Commission
HRD	Human Resource Development Programme
HSC	Higher Secondary Certificate
LSE	London School of Economics, UK
LUMS	Lahore University of Management Sciences
MOE	Ministry of Education
MoST	Ministry of Science and Technology
NTS	National Testing Service
NWFP	North West Frontier Province
ODA	Overseas Development Administration
PAEC	Pakistan Atomic Energy Commission
PARC	Pakistan Agricultural Research Council
PCST	Pakistan Council for Science and Technology
PINSTECH	Pakistan Institute of Science and Technology
PPP	Pakistan Peoples Party
SSC	Secondary School Certificate
S&T	Science and Technology
TCTP	Technical Cooperation and Training Programme
UGC	University Grants Commission
USAID	United States Agency for International Development

Preface

This paper is one of a number of regional reports commissioned as background for a history of the Commonwealth Scholarship and Fellowship Plan. The history has now been published as:

Learning abroad: A history of the Commonwealth Scholarship and Fellowship Plan by Hilary Perraton
(Cambridge Scholars Publishing) 2009

Material has been drawn from the country reports, and is quoted and referred to in *Learning abroad* but it was thought that it would be useful for the reports themselves to be made available in web format. This report was drafted in 2008.

I am personally indebted to the scholars who wrote the country reports and we are together indebted to the four agencies that funded the research: the Commonwealth Secretariat, the Nuffield Foundation, the British Academy with the Association of Commonwealth Universities, and the Department of Foreign Affairs and International Trade of the government of Canada. Funds from the government of Canada were used to pay for this report.

Hilary Perraton
Cambridge 2009

1. Introduction

What follows is a case study of the Pakistan experience under the Commonwealth Scholarship and Fellowship Plan (CSFP). Since the very beginning in 1959, the CSFP has focused on providing a network of studying opportunities in Commonwealth countries that dovetailed with the development goals of these countries. More fundamentally, at the centre of the plan have been the idea of mobility and the exchange of ideas. How successful has the CSFP been in Pakistan in offering academic opportunities, buttressing this country's development goals, ensuring social mobility for its students and at the same time developing capacity for the exchange of ideas? It would be audacious to claim that the CSFP impact was the central fact in the development of scholars' careers or the development path of these countries. It is however indisputable that there was an impact of varying magnitudes and this case study offers insight into that experience. The insight however is based mostly on the UK CSFP experience, which it could be argued is reflective of the broader experience given the dominant role of the programme in terms of the numbers of scholars and fellows who came to study in the UK, which fails to capture the diversity of the CSFP experience across all Commonwealth countries.

An inevitable part of the Pakistan CSFP story is linked to Pakistan's own history with the Commonwealth. Pakistan's turbulent history --its civil war and experimentation with authoritarian regimes--has meant that for large parts of its post independence history it was not part of the CSFP. Pakistan was an active participant in the first decade of the CSFP (1959-1972), rejoining in 1989¹. Despite Pakistan's rather chequered participation, it is still possible to argue that CSFP scheme has made an important contribution to Pakistan's human development.

Section 2 lays out the methodology of this study and highlights the sources on which it draws upon. Section 3 looks at the development of higher education in Pakistan. Section 4 delves into the history of the CSFP programme in Pakistan. Section 5 examines key trends among scholars and fellows who studied under the CSFP while Section 6 focuses on the key management changes and particular issues the CSFP faced over time. Section 7 looks at the impact of the programme while Section 8 looks at the experience of the CSFP scholars and fellows. Section 9 concludes.

2. Methodology

This case study has drawn upon a number of sources. This includes archival materials based in Commonwealth Scholarship Commission (CSC) London, interviews of scholars and managers of the CSFP in Pakistan, as well as questionnaires of a number of CSFP scholars and fellows.

Extensive archival material based at the CSC London proved critical for capturing not only the history of Pakistan's participation in the CSFP but also to capture the early scholars and fellows' experiences, particularly those who participated in the CSFP before 1972. The CSC archives had a range of material including memos, minutes from CSC meetings, and supervisors and scholars report.

To capture trends of the CSFP, the author relied on data annually published in the Commonwealth Scholarship Commission UK Annual Reports (henceforth referred as ARUK). These annual reports offer a comprehensive picture of the number of nominations requested and made, actually awards take up, distribution of subjects and age and some figures on the gender of scholars. To capture the CSFP scholars and fellows' own experience, the author drew on interviews conducted during September 2007 and June 2008 as well as on the CSC Evaluation Survey conducted in the beginning of 2008.

The CSC Evaluation Survey was sent to a total of 154 Pakistani scholars whose records are maintained by the CSC. Although, CSC received a total of 66 questionnaires back, the author was only able to access the data from 29 respondents because of strict data protection laws in the United Kingdom. Unfortunately, as scholars were not initially asked whether researchers working for Dr Hilary Perraton's book, could access their data, they had to be contacted again retrospectively for their permission. Of the 66 who filled out the questionnaire, only 30 respondents gave permission of which one was a former East Pakistani, currently living in Bangladesh. This last respondent was dropped for consistency purposes. As this is a self-selected group, i.e. those CSFP scholars who choose to be in active contact with the CSC, an attempt was made to capture the experience of scholars who had

¹ Throughout this paper the first phase of CSFP refers to the period 1959-1972 and the second phase refers to the period 1989 to present.

not maintained contact with the CSC over time (see below). Finally, the author also conducted a total of 25 interviews, both in person and by phone. Of these interviewed 17 were interviews of CSFP scholars and fellows, while 8 interviews were of different persons connected with the management of the CSFP. Those fellows and scholars interviewed are again self selected, i.e. those who are active alumnae and maintain contact with CSC.

The author attempted her own survey for the Pakistan scholars and fellows which was unsuccessful. In order to capture those who have not chosen to maintain contact with CSC, an attempt was made to trace those scholars. The author was able locate email addresses (but was not able to verify) for 41 scholars. A separate questionnaire was sent out on her behalf by the CSC to both the 154 scholars whose contracts are maintained by CSC and those former scholars and fellows traced by the author. Unfortunately the response rate was extremely low for this questionnaire. Out of these scholars contacted only 10 scholars replied, none of which were those traced. Hence it was decided to ignore this questionnaire and focus on the CSC Evaluation Survey conducted in 2008. One possible explanation for the low response rate is the overlap in the timing of both the CSC Evaluation Survey and the Pakistan Questionnaire. Given that broadly the same scholars were targeted by both questionnaires, there was contact overload. Scholars who were interviewed mentioned they were confused between the two questionnaires; many articulated that they thought that the two questionnaires were the same and filling one meant that they had filled both. As to those who were traced and who failed to respond, this probably reflects the failure of the tracking exercise. This highlights the challenge of contacting alumnae who choose not to keep in touch with the CSC.

3. Higher education priorities in Pakistan

At independence in 1947, Pakistan's division of the spoils, vis-à-vis educational, technological, and scientific institutions, was meagre by any comparison. There were at independence two fully functioning universities, three to four small laboratories and one agricultural college cum research institute (Qurashi & Qazi 1992: 3). Total enrolment at the time was 644 students of which 56 were women (Isani and Virk 2005: 40).² Yet despite these inauspicious beginnings, like any other recently independent country, the aspirations in terms of development were high, implying a heavy investment human capital. The new leader of Pakistan, Mohammad Ali Jinnah stated at the first Education Conference on 27th November 1947:

There is an immediate and urgent need for giving scientific and technical education to our people in order to build upon future economic life and to see people take to science, commerce, trade and particularly planned industries (Isani and Virk 2005).

It will be interesting to see if the priorities outlined in Government of Pakistan's (GOP) policies were reflected in the selection and subjects studied under the CSFP scheme.

The first phase of the CSFP scheme overlapped with General Ayub Khan's (1958-1969) regime, a period noted for an activist role of government in science and technology targeted towards greater industrialization. The first Commonwealth Education Meeting in Oxford in 1959 coincided with the Commission on National Education of 1959, seen to be the first comprehensive analysis of Pakistan's educational priorities (Isani and Virk 2005: 12). This in combination with the Scientific Commission of 1960 sought to radically reform education and science education and research in the country. The National Education Commission noted that education should "...provide opportunity for the development of skills of the people, training of a leadership group and promotion of vocational ability; all of which are essential for the creation of a progressive and democratic society," as well as "...play a fundamental part in the preservation of the ideals which led to the creation of Pakistan, strengthening the concept of a united nation, and striving to preserve the Islamic way of life;" (Isani and Virk 2005: 12). These twin ideals of modernization and preserving Islamic values have consistently remained themes in Pakistan's education policy documents until the current time.

The Scientific Commission of 1960 was established to consider how to maximize scientific research and make scientific careers more attractive. Among the commission's final recommendations were the following: (i) Giving top most priority to strengthening scientific effort in universities and research institutes –and priority areas

² These figures are likely to be representative for West Pakistan alone. Asadullah (2006) quotes Jilani (1964) and gives a breakdown of universities by East and West Pakistan in 1953-54 and notes there were two universities in East Pakistan with a total of 3,093 students and four universities in West Pakistan with a total of 2,355 students.

included agriculture, irrigation, energy, industry and public health (ii) establishing a National Science Council to coordinate and integrated scientific effort in the country and (iii) establishing a “Pakistan Science Service” which required a *massive training programme* (Qurashi & Qazi 1992: 7-8). All these priorities were somewhat met, with the establishment of advance studies in research in universities, establishment of universities in agriculture and engineering and the establishment of National Research Council (Qurashi & Qazi 1992: 12).

The Bhutto and Zia governments overlapped with periods when Pakistan was excluded from the Commonwealth and hence excluded from the CSFP scheme. Complying with Bhutto’s more populist agenda, the New Education policy of 1972-1980 emphasised the role of education “...to act as an instrument of social change and development,” as well as arguing for reorienting education “..in light of economic needs of the society particularly by shifting the emphasis to scientific, technical and vocational education” (Isani and Virk 2005: 13). Within domestic policy—there was a strong emphasis on nationalized institutions and nationalizing previous private sector managed institutions. Priorities for the government were strengthening post graduate teaching, and establishing centres of excellence for selected disciplines and building up a National Research Fellowship Scheme. Science and technology continued to be the State’s priority for its broader development agenda. The Zia period saw the slow emasculation of the tertiary sector mostly because of university politics. In terms of policy, the education policy manifestos overall complied with those of the New Education policy of 1970, but with a stronger reference to Islamic principles. (Isani and Virk 2005: 50-51). Nineteen eighty five did see the reinstatement of the Human Resource Development Programme (HRDP) by the Ministry of Science and Technology (MoST) which was the first concrete commitment of the GOP to build up scientific and technical manpower for the purpose of ensuring that the country develop self reliance in science and technology (PCST 1996: 5). Although some variation on this objective has been held by all governments in power since this recommendation had been made by the Scientific Commission of 1960, 1985 saw the first financial commitment to it. The HRDP remained in place until 1995.

The return of democracy in Pakistan in 1989 also meant the reinstatement of Pakistan in the Commonwealth and to the CSFP scheme. However the decade of democracy in Pakistan, 1989-1999, was associated with political instability and numerous short term governments. In this period, there were numerous changes in government.³ In terms of education policy, the frequency of government changes meant a lack of consistency in policy as well as limited implementation on government announcements. However, the 1990s saw the growth of private sector delivery of education across all levels both because of global shifts in ideology but also because of governments’ financial constraints and budgetary priorities.

The Mushraf Period (1999-2008) has brought the most radical reform in the higher education sector. This has been both institutionally in terms of the governance structures that manage higher education, but also in terms of resources allocated to the tertiary sector both from domestic finances as well as international aid. Pakistan’s status as a frontline state in the “War on Terror”, has meant that bilateral funding for scholarships for both tertiary and vocational courses have been readily available. The driving goals were set up under the last Nawaz Sharif government of 1997 where there was concern both with the low intake (2.6% of relevant target group) as well as the distribution of arts vis-à-vis science students in the country (70:30 favouring arts). These figures contradicted the earlier rhetoric in prioritizing science and technology. The goal became to increase enrolment from 2.6% to 5% of the target group as well as to realign subjects taken to 50:50 for arts and sciences (Isani and Virk 2005: 61). In terms of governance structure, the most far-reaching reform has been the establishment of a buffer body called the Higher Education Council (HEC). This is an independent and autonomous central body whose task is to evaluate, improve and promote the higher education sector in Pakistan. The HEC constitutionally has been given far reaching powers which has strengthened its policy-making capacity and authority. Its chairman has been given ministerial powers (Raza 2006; Fielden 2008). Dr Atta-ur-Rahman, the chairman since its inception, is a former CSFP scholar who attended Cambridge in 1966 to study chemistry. The wide-ranging governance reform has had implications for the management of the CSFP scheme which will be discussed in Section 6.1.

4. HISTORY OF THE CSFP IN PAKISTAN

4.1 The initial years (1959-1971)

From the beginning, two countries stood out among the old Commonwealth countries in terms of quantity of awards offered. Both the United Kingdom and Canada were the first nations to accept scholars from Pakistan and over time accepted the most Pakistani scholars (see Section 5). Awards for Canada and United Kingdom

³ Between 1989-1999 there were four elected governments and four interim governments in Pakistan.

were made simultaneously in 1959 and 1960. By the second year, applicants that were short-listed for UK and Canada were considered for additional scholarships in New Zealand and Australia (ARUK 1960-61). The first batch of scholars to the United Kingdom studied a range of subjects including: soil mechanics, mathematics, history; political science, statistics, entomology, economics, dental surgery, English, and cardiology biochemistry. Those who went to Canada were attracted to similar subjects, including: chemistry, electrical engineering, mechanical engineering, physics, civil engineering and English. In that first year, Pakistan also instituted 13 awards for scholars wishing to come to study in Pakistan and nominations were asked from Canada, United Kingdom and interesting India (ARUK 1960-61).

In 1962 during the second Commonwealth Education Meeting (CEM) in New Delhi a decision was made to expand the remit of the award in order to make it more relevant for developing countries. Hence, it was decided to extend the award to three year diploma courses in more vocational areas such as radio repair, welding, and metallurgy, air conditioning and refrigeration technologies etc. These courses made Pakistan attractive for scholars from the new Commonwealth countries seeking qualifications because of a number of polytechnics that were established in Pakistan. Nineteen sixty two also brought the first scholars who took advantage of awards offered by Pakistan with two British scholars coming to Pakistan (ARUK 1962-63). In the subsequent year (1963-1964), Pakistan extended its awards to an additional number of countries, including Cyprus, Hong Kong, Jamaica, Mauritius, Trinidad and Tobago and Zanzibar. For the first time also Pakistani scholars took up awards in countries other than the old Commonwealth countries, with the first Pakistan scholar going to Malaysia. For the first time Pakistan also began receiving scholars from the new Commonwealth countries with the first scholars coming from Ceylon and East Africa. The East Africans came to take up vocationally oriented courses, specifically automobile and refrigeration engineering at Karachi Polytechnic (ARUK 1963-64). The first Pakistani scholar to travel to Africa did so in 1966-1967 when a scholar travelled to Ghana to study architecture at Kumasi University (ARUK 1966-1967:). The Commonwealth Senior Medical and Medical Fellowships began in 1965 and Pakistan's first fellow went in 1966-1967 to study at the Institute of Urology, London to study artificial kidney techniques (ARUK 1966-1967). Although the Academic Staff Fellowships began in 1968, Pakistan received its first Academic Staff Fellowship in 1970-1971 with four additional fellows travelling in the next year (ARUK 1970-1971; 1971-1972).

4.2 The Civil War and the subsequent hiatus (1972-1989)

The subdivision of Pakistan into two nations had serious political and logistical implications for the CSC and the British Government. The political crisis in the aftermath of the 1970 election was a product of unwillingness of West Pakistan's Pakistan Peoples Party (PPP) to let the East Pakistan's Awami Party form the government after winning 167 seats, all in East Pakistan, securing a simple majority in the 313 seat lower house of parliament in Pakistan. Nineteen seventy one proved to be tumultuous year in East Pakistan with mass mobilization and crackdowns by the Pakistani army. By the end of the year, full-fledged war had broken out between India (in support of the independence movement in East Pakistan) and Pakistan. By the end of December 1971, the Indians and East Pakistanis were successful and Bangladesh came into being.

The political unrest in East Pakistan after the 1970 elections quickly began to pose problems for the British Government. There were simple logistical issues of what was to be done with completing scholars who did not wish to return to East Pakistan at time of civil unrest; the concern about whether selected scholars from East Pakistan for 1971-1972 would be able to travel to take up their scholarships; and worries about the Commonwealth scholars who were on scholarship in Pakistan. In 1971 there were 46 Pakistan Commonwealth scholars in the UK of which more than half, 24 in total, were from East Pakistan. Of the 24, 13 scholars were eligible to go home by September 1971 as their awards were at the end and out of the 13, nine had held the award for the maximum period of three years (CSCM 6.7.1971). For those who had not availed all possible years of their scholarship, and if there were good academic grounds for them to continue, the British Government was willing to consider the awards continuation. The concern was really for those scholars who had come to the end of their scholarship but had expressed a clear wish that they did not wish to return to East Pakistan. The decision was made "...that the British Government was acting on the principle that no Pakistani from the East wing would be sent home against his will. In this case, where further training in the United Kingdom is not possible or desirable to arrange, the Overseas Development Administration would continue for the time being to pay maintenance allowance, reviewing the situation at the frequent intervals" (CSCM 6.7.1971). There is some indication that scholars from East Pakistan were not even being able to travel to take up their awards. For the year 1971-1972, of the eight scholars who failed to take up the awards, seven of them were from East Pakistan (CSCM 7.12.1971:11b & c).

Things came to a fore with Britain's formal recognition of Bangladesh. In protest Pakistan decided to terminate its membership of the Commonwealth which also meant Pakistan's exit from the CSFP scheme. This obviously meant no more awardees from Pakistan. Decisions also had to be made about existing Pakistan Commonwealth Scholars who were currently studying in the UK. In a letter dated 21 February 1972 to the CSC from the Overseas Development Administration (ODA), the ODA decided:

We do not insist that Commonwealth Scholars and Fellows already studying here should return home immediately, but suggest that they should be allowed to complete their present courses of study even though it might entail a second or third year in Britain if the Commission so recommended on academic ground. We have also advised the [British] High Commission that no further application for the CSFP awards can be accepted from Pakistan, that all awards not yet taken up will be withdrawn and any still in the pipeline will not be processed (CSCM 28.3.1972).

This was a precedent that had been set when South Africa had left the Commonwealth, when it was agreed that their scholars too finish their degrees.⁴ Hence 1971-1972 was the last year that awards were made to Pakistani scholars in any of the Commonwealth countries until Pakistan's reinstatement in 1989. Subsequent to that in 1972-1973, no awards were made to Pakistan, but Bangladesh submitted 63 nominations with a total of 16 awards taken up in the UK. Nevertheless, a number of residual Pakistan Commonwealth Scholars remained to complete their scholarships in the UK. In 1972-1973 these numbered 34 scholars, although they were indistinguishable between former East and West Pakistani. This number trickled down to 17 scholars in 1973-74, four in 1974-1975 and two in 1975-1976 (various ARUK).

Whereas, Pakistan's exit from the Commonwealth left the governments of the Commonwealth little choice but to end Pakistan's participation in CSFP scholarships, other UK associated scholarships programmes continued. Scholarships for example continued to be offered through the Technical Cooperation Training Programme (TCTP) administered by the ODA. At the same time scholarships such as those offered by the Rhodes Trust continued to favour Pakistani candidates. The Trustees of the Rhodes Trust choose to allocate the scholarship for the 1973 election for Pakistan alone. Although initially the 1974 election was proposed for Bangladesh, this was cancelled because of its potential to upset Pakistani sensibilities. From 1976, an election from Pakistan was made every third year which was converted back to an annual one in 1984. Bangladesh did not elect a Rhodes Scholar until 1997 (Kenny 2001: 455-456).

4.3 Return to the Commonwealth fold (1989 - onwards)

Pakistan's re-entry into the Commonwealth in October 1989 followed the return of democracy to Pakistan in 1988. Immediately upon re-instatement the ODA made an additional £275,000 available to the CSC for 1990 - 1991 to fund awards for Pakistan. The ODA committed itself to allocating broadly similar monies for future years and no specific directives were given for which specific subjects the awards should cover. Special exceptions were made for the nomination process in the first year of re-instatement. As the usual deadline for nominations, December 31st, was seen to be insufficient for Pakistan to organize itself, the deadline for Pakistan's 40 nominations was given as April 1990 and were considered at a special sitting of the Selection Committee in May of 1990. Subsequent to this unique procedural year, it was expected that Pakistan would be able to follow normalized practice and timetable (CSCM 5.12.89: 2). After fifteen years in the wilderness a number of issues faced the Commission. First, there was a concern that the number of awards vis-à-vis resources available and there was a concern that awards would be spread too thin if more resources were not made available. Second, there was the issue of who should be responsible for making the nominations. For scholarship schemes like the Commonwealth Academic Staff Scholarship and the Commonwealth Medical Scholarship there was a discussion whether nominations should be made by a centralized representative body, i.e. like the University Grants Commission (UCG) or the medical councils, or should they be made directly by individual hospitals or universities. There was an implicit preference in the Commission that Pakistan follows the tradition of India and Bangladesh and follow a centralized process of nomination. The Commission encouraged the local British Council to guide the relevant authorities towards that direction (CSCM 5.12.89: 2). As noted below, the CSC and the British Council were unsuccessful in this endeavour. Overall, the nomination process structure in Pakistan post 1989 very much mirrored the earlier period of 1959-1971. Change, when it did come, happened post 2002, brought in with the more radical reform of the higher education sector under the Musharraf regime (see Section 6.1)

⁴I am thankful to Dr Perraton for sharing this insight with me.

5. Trends

What do we know about trends in CSFP? What were the numbers of scholars who went from Pakistan and the numbers of scholars who came to Pakistan to study under the programme? Which Commonwealth countries did most of the Pakistani scholars travel to? What did they study and at which level? To answer these questions we draw upon data maintained in the ARUK predominately from the earliest years (1960s and 1970s) of scholarship as the earlier data was more systematically maintained. There is no data for the eighties as Pakistan had exited from the Commonwealth, while in the nineties a number of changes were made in how data was reported in the ARUK which makes systematic reporting of trends over time difficult.

It is worth mentioning a number of major breaks in the trends which accompanied Pakistan's re-entry into the Commonwealth in 1989. The most significant break was in the 1990s when no nominations were invited or awarded by the GOP to other nominating countries in the Commonwealth. This is a significant break from the early years of the CSFP when the GOP was quite generous in its invitation to awarding countries and Pakistan did have a number of scholars from the Commonwealth who came to study (see Table 3B). Secondly, the 1990s also saw a narrowing of the number of awarding countries who invited nominations from Pakistan. Whereas in the first decade of the scholarship, nominations were invited from a diverse set of countries including Malaysia, Sierra Leone, Ghana and the former Rhodesia, this diversity evaporated when Pakistan re-entered the Commonwealth. The countries who continued to invite nominations from Pakistan were predominately the advanced nations of the Commonwealth with the exception of Malaysia and Brunei (see Table 1A).

In terms of numbers, cumulatively, the largest numbers of nominations invited by all awarding countries for Pakistan (Table 1A) occurred during the first phase specifically, 1961-1962 to 1963-1964. At their highest, nominations invited were in the 80s but over the whole first phase the number averaged around 73 nominations invited a year. Subsequent to Pakistan's re-entry into the Commonwealth in 1989, fewer nominations were invited from Pakistan, averaging around 45 nominations a year. For most years the nominations made by Pakistan were less than the nominations invited by awarding countries indicating the difficulty of finding enough qualified candidates for these scholarships. Vis-à-vis the number of nominations invited by Pakistan, the number of applications made by other nominating countries was always relatively poor. On average over the first phase when Pakistan invited nominations for scholarships in Pakistan, it invited 40 nominations a year. However the number of nominations made average around 10 per year (Table 1B).

As to take up of awards by Pakistanis, the highest take up on the part of Pakistani scholars was 43 scholarships in 1968-1969 in the first phase (Table 3A). Overall though during the first phase of the CSFP in Pakistan, the number of take ups average around 31 scholarships a year. This figure dropped quite substantially after Pakistan's re-entry to the Commonwealth in the 1990s when the average fell to approximately 14 take-ups a year although the highest single year was 1994-1995 when the take up was 44. Britain and Canada's dominance over the scholarship programme is evident both in terms of the nominations invited and the number of scholarships that were taken up in these two countries. However, in absolute terms the number of take ups fell between the two phases that Pakistan was part of the CSFP scheme. Whereas earlier, take-ups in Britain and Canada averaged 20 and 9 respectively, this fell to 13 and 4 respectively after 1989 (Table 3A). As to take up in Pakistan by other awarding country scholars (Table 3B), at the height, the total number of scholars who came to Pakistan was seven. For the most part, the scholars were widely distributed across both more advanced and developing countries of the Commonwealth.

How were scholarship held in any one year distributed across subject areas? As Table 4 indicates the sciences clearly dominate. In the sciences, there are a number of subjects including pure sciences, medicine, dentistry, technology and agriculture and forestry. Overwhelming these were the subjects which had the largest take up. On average in the first phase of the scholarship, 77% of all scholarships taken up by Pakistanis were mostly in the sciences. Indeed in the 1970s, 90% and above of all scholars were in the sciences. Figures for the second phase are sparse and it is difficult to generalize about trend but again what figures we do have for the post 1989 period also suggest that the sciences continued to dominate the subjects that scholars studied. Of the subject areas within the sciences, the two that dominated were the pure sciences and technology. Medicine also became increasingly important in the 1970s, probably reflecting the introduction of the Medical Fellowship Programme. As to the types of qualifications that scholars were opting for, overwhelming scholars opted for higher degrees, i.e. post graduate courses. Although the numbers of scholars taking up research degrees was few, this is likely to be a misrepresentation, as many of those who went for post graduate degrees would have gone on for research degrees if they were able to qualify and had the requisite funding.

6. Management of the Scholarship Programme

6.1 Overall management

The overall management of the CSFP programme was established in 1959 and acquired a historical continuity that exists even today. The CSFP “secretariat” was set up within the Ministry of Education (MOE) under the guidance of the Educational Advisor in the relevant wing in MOE under which the scholarship programme came, assisted by a Deputy Education Advisor and a Section Officer. The basic management structure continues today as does the structure and number of the human resources required to run the programme. At different points, the CSFP secretariat was located under different wings of the MOE. Upon Pakistan’s reinstatement into the Commonwealth, the CSFP secretariat was located in the International Cooperation Wing but subsequently was shifted to the Training Wing in 2002.

The GOP’s attempt to streamline the scholarship allocation process, as part of its broader higher education reform, meant some re-organization in institutional oversight over scholarships. Until 2002, all oversight for all scholarships and fellowships offered under the CSFP under the MOE as it had been done since the inception of the programme in 1959. However, a decision was made to centralize all scholarships under the HEC in 2002. However, the GOP has not been that successful in centralizing the CSFP under the HEC. Instead a bifurcated system has evolved to manage the CSFP since 2005. Between 2002-2005 a battle ensued over CSFP oversight and management (Siddiqui 2007). A compromise was reached in 2005. Overall the MOE continues to maintain oversight over the Commonwealth General Scholarship as well as functional fellowships programmes. However all Commonwealth scholarships relating to PhDs, post docs and split PhDs now come under the remit of the HEC (Siddiqui 2007 and Ahmed 2007). At the current time these number 15 post docs, 5 splits PhDs, and 10 PhDs. Despite this bifurcation, the realm of responsibility between these agencies has not been clearly determined. Within the MOE, there is a view that the management of the programmes which have gone to HEC is only a temporary and the MOE will some day return to managing them (Ahmed 2007). Even now, for all administrative purposes, the MOE remains the main point of contact for the CSC who has little interaction with the HEC.

The CSFP’s management differs from other scholarships in Pakistan and in the process is considered to be less transparent.⁵ This remains true, despite some of the recent changes in the selection process which is discussed further below. The largest scholarship programme, The Fulbright Scholarship, funded by the US government with some Pakistani funding, and the many of the scholarships offered by the Australian government are managed completely by agencies of these governments. Certain scholarships that originate in the UK, for example, the Chevening Scholarship or the Shell Centenary Scholarship are managed by The British Council. A whole spew of bi-lateral scholarship from countries as varied as Korea to Cuba are managed by the HEC in addition to part management of programmes like CSFP. At the current time, approximately 1000 scholarships are managed by the HEC under the HRD department. This department alone accounts for 80% of HEC’s budget (Siddiqui, 2007). Training as distinguished from scholarships for long term academic qualifications is managed by the Economic Affairs Division in the Ministry of Finance. Other sector specific programmes have in the past been directly managed by the relevant ministries i.e. the HDRP is directly managed by MoST.

Scholars and fellows interviewed for this case study prefer the application process for US Fulbright for instance and state that the application process seemed more transparent with applicants having greater agency over the process. Dr Sadia Mansoor, a CSFP fellow, states “I would it [CSFP] to be more like The Fulbright. That way you would not be subjected to nominations process but you would be evaluated by your peers” (Mansoor, 2008). The application process for The Fulbright involves the applicants and reviewing your application. The Fulbright is widely advertised and those who are keen to apply do so directly to the United States Education Foundation in Pakistan. There is not intermediation by the MOE or university or any other employer bureaucracy who can circumvent a person wishing to apply.

6.2 The selection process

The selection process for the CSFP has always been bifurcated between the relevant management structure in the nominating country and the relevant institution in the awarding countries. Awarding countries ask nominating

⁵Besides the CSFP, the MOE also manages The Cultural Exchange Protocol, Pakistan originated scholarships for students for Indian Occupied Kashmir and Bangladesh as well as the Local Scholarship under the President’s Directive.

countries for a specific number of nominations from which the awarding country subsequently chooses to award a limited number of awards. This applied to the General Scholarships as well as the functional scholarships. In Pakistan's case the applications were considered and nominations made by a selection committee that was comprised of the following members: (i) educational advisor to the GOP (ii) two vice-chancellors from Pakistani universities (iii) a representative of the awarding country and (iv) the deputy educational adviser. To cover the wide regional distances and diversity, it was instituted that the selection committee would meet in the three major cities, specifically, Lahore, Karachi and Dhaka (ARUK 1960-61). In more recent years, the composition of the selection committee has become focused on the bureaucracy itself. In 2003, the selection committee was composed of (i) junior secretary (admin) MOE (ii) directorate general (academics) HEC (iii) joint economic advisor (Advanced Education) in the Ministry of Finance and (iv) the deputy educational adviser (Sentate Question 30.4.2003). Selection is also now located in Islamabad alone.

After the Pakistan's reinstatement into the Commonwealth, the common practice for the General Scholarship became to widely advertise in the local press and applicants directly applied to the MOE. For the fellowships, the MOE directly approached universities by writing to vice-chancellors asking them to recommend individuals for the fellowships for the coming year. Those recommended by vice-chancellors were and are the only candidates considered by the MOE for these fellowships. This practice of asking for nominations from various institutions for fellowships goes against the CSC's own recommendation in 1990 for a centralized clearing house for the nomination process as is done in India and Bangladesh where nominations are managed by the University Grants Commission (UGC) (CSCM 5.12.89:2).

For the General Scholarship, applying is a two step process. Short applications are filled first, from which a sub-selection is made for a longer application and a interview. The CSFP secretariat sends two lists --a principal and an alternative list of nominees. If for example, the UK asked for 30 nominations, the CSFP secretariat would send 60 names, 30 on the principal list and 30 on the alternative list. Awards made in the UK would draw on both lists to determine the final list of awardees (Ahmed 2007).

It is worth exploring what the basis of selection is of nominees for the General Scholarship. In the 1961-1962 Pakistan's annual submission in the ARUK report notes that the main criteria of selection are to be academic performance and the personality of candidate. However also critical was the "...usefulness from the national point of view of the proposed field of study and the likelihood of the candidates' taking up a career in the universities are also taken into account" (ARUK 1960-61). This clearly indicates the priority placed on developing the human resources of the university sector. The criterion for selection was not solely based on merit alone. Also of consideration was selecting nominees who represented the regional diversity of Pakistan.

Before 2004, the selection process for the General Scholarship was more subjective, based on a mix of academic performance and interviews. The academic criterion on which candidates were selected was based on a ranking determined on a weighted average of results on various examinations and qualifications. Of consideration was an applicant's mark on the Secondary School Certificate (SSC), Higher School Certificate (HSC), BA/ B.Sc. as well as graduate qualifications. Box 1 lays out the rules that were applied to determine the ranking on which both the principal and alternate lists until 2004. Subsequent to this short listing, a certain number of candidates were invited for an interview for which the weightage placed was 70% (Sentate Question 30.4.2003). The final rule of selection is that candidates meet the provincial quotas which reflect the political constraints facing the GOP where provincial politics over distribution of state resources is a contentious issue. The current quota requires nominees to be selected based on the following criteria: Punjab 50%; Sindh 19%, Balochistan 5.3% and NWFP 15.7% with 10% given on the basis of academic merit alone. Based on the final determining criteria, the MOE comes up with a principal and an alternative list of nominees which is subsequently sent to the CSFP for the final selection.

BOX 1

Rules to determine weightage for ranking for the General Scholarship until 2004

Ranking based on following:

- Percentage of marks in SSC multiplied by 1
- Percentage of marks in HSC multiplied by 2
- Percentage of Marks in BA/B.Sc. multiplied by 2
- Percentage of marks in MA/M.Sc. multiplied by 3
- Percentage of marks in B.Sc. Engg, B.Sc. (hons) Agriculture, Doctorate of Veterinary Medicine/Bachelors of Medicine or Bachelors of Pharmacy or other degrees equivalent to MA/M.Sc. multiplied by 5
- M.Ed degree or B.Ed plus M.Ed will be take as equivalent to MA/M.Sc. and percentage mark will be multiplied by 3
- With a three year B.Sc. (hons) degree followed by a one year M.Sc. the percentage marks of BA/B.Sc. (hons) will be multiplied by 3 and that MA/M.Sc. by 2.
- 50 additional marks will be added M.Sc. Engg, M.Sc. (hons) Agriculture, FRCS, MRCP and the M.Phil degrees.
- Applicants possessing a professional degree, i.e. engineering, and also having a Master degree in another field of study, i.e. business management etc, their professional degree will be treated as a ordinary BA/B.Sc. and their Masters degree relevant to the field of proposed study will be given due weightage.

Source: MOE

In 2004 the selection process was changed to a more objective criterion. Rather than selection being based on part examination results, part qualifications, and interview, the MOE implemented a nationalized standardized test conducted by National Testing Service (NTS), an independent professional testing agency. The test is standardized knowledge and skill assessment test based on the American Graduate Record Examination (GRE). This is now an annual test which all applicants for the CSFP General Scholarship undertake. Currently, the other requirements for eligibility of the scholarship are the following:

- The candidate must have completed 16 years of education;
- The applicant must hold a first class Master degree or equivalent in their relevant field;
- Applicants having more than one-second division in their academic career are not eligible;
- The applicants for the CSFP must have a good proficiency in the English language and provide the IELTS/TOEFL certificate in this regards with a minimum grade of 6.5 respectively.

Candidates who meet these requirements and who have competed on the NTS test are then ranked based on their NTS scores by province as well as nationally. This list is then cropped as per the quota and then to forwarded to the CSC. The provincial quotas continue to be maintained despite the other changes in the selection process. No longer is any consideration given to interviews, part experiences etc., which according to some scholars is regrettable. For those scholarships managed by the HEC since 2005—specifically the post docs, PhDs and split PhDs—the selection criteria is based on merit alone and no quotas are observed (Siddiqui, 2007). The selection process for the fellowships remains the same. Candidates continue to be nominated by their vice-chancellors or other leaders of their institutions who subsequent to their nomination fill applications and then are interviewed by both the general body, as well as specialists in their fields at the MOE. These nominations are than forwarded to the CSC.

What factors led to the adoption of the NTS system for the General Scholarship? The official reason given for the change was the “complaints from candidates regarding assessments of their academic merit which was based on scores in standard examinations form various Boards and Universities across the country. Therefore the selection criteria were changed...” (MOE documents). The more likely reason for the change were the complaints made about nepotism and corruption in the selection process. As noted by a MOE official the change to the NTS system was to make the process “...more transparent.” (Gulam 2007). Although transparency is welcomed by many others worry about the narrowing of diversity. One former scholar, Mr. Saeed-ullah Khan noted that, “For me the CSFP is not just about academics—it is about everything like leadership, extra-curricular etc. It is about opportunity, about an engineer wanting to become something else. I worry that those things will get ignored with the implementation of the NTS. There will be no link between past, present and future” (Khan, 2008).

The perception among CSFP fellows and scholars interviewed for this project is that nepotism and corruption is common in the CSFP process. Most of the people interviewed showed concern about this issue and felt that they had been selected *despite* the nepotism in the system, i.e. that they were the exception to the otherwise corrupt

system. The scholars interviewed explain this by highlighting the one positive of the selection process was that the awarding country is the final arbitrator in who actually receives the award. They argued that if one was able to get on the principal or alternative list, selection on merit was possible because the final decision makers are awarding countries.

One scholar talked quite candidly about how he used nepotism to ensure that his application was given due consideration. In his case, the scholar had applied for the General Scholarship in 1991 but never heard anything from the MOE despite being a strong candidate. Upon inquiry he was told that his “file had been lost”. As this candidate already had a PhD place at Oxford he went ahead for his PhD because his current institution, Lahore University of Management Sciences (LUMS), helped him with a grant. He used his contacts (a former foreign secretary) to find out what happened and found that “No one was putting my name forward.” His reading of the situation was that this was because he was from a minority religious community. The next year he reapplied and another gentleman from this community within the MOE ensured that his application was appropriately considered.

Other scholars too expressed some dissatisfaction with the selection process. Mr. Saeed-ullah Khan felt that the selection process was fraught with problems and had issues with how his own application was handled. He describes the process as having “...no system at all” (Khan 2008). Mr. Saeed-ullah Khan dissatisfaction began with the interviewing process which he states lasted all of three minutes. Further, he was told upfront that the scholarship was not for him if he was interested in studying development. Mr. Saeed-ullah said he was quite discouraged and did not think he stood a chance of getting the scholarship particularly because there were others at the interview who clearly advertised their connections to certain high up VIPs. “People were quite open about their political links” (Khan, 2008). Sadia Mansoor a physicist, although happy with the outcome of her application process was perturbed by the lack of qualified interviewers on her interview panel. She observed

.. there was no physicist on the interview panel. It was adequate that I was organized and had an acceptance. No one asked whether I was academically qualified for the award. I had no problem.....but if some-one is nominated who is not deserving then a academic expert can screen them out. Local context matters. Nominations have to go through a huge hierarchy, the HOD, the Dean, the VC. If there is a political problem, there is no mechanism to check this (Mansoor 2008).

Others have grave concerns about how nominations are made for fellowships. Dr Gul M. Khan, currently the Dean of the Faculty of Pharmaceutics at Gomal University, highlights the ambiguity of the process. He notes, “Somethings are visible and transparent and others are not. There were two other candidates who were just added to the list and placed ahead of me. I was best merit wise but was third on the list. What is required is much more transparency.” Nevertheless, he was pleased that the final selection is made in London which he says ensured his selection. He feels that if this was not the case, the other two candidates who were more senior would have been sent ahead. Others however like Dr Jadoon Khan and Dr M. Siddiq, both fellows were overall quite satisfied with the selection process.

6.3. Other issues

Over the years a number of other issues regarding the CSFP scheme and its management have come up in correspondence between GOP and the CSC and in the process have highlighted areas of tension between the GOP and CSC.

Numbers of scholarships: An issue that has consistently come up is a concern about the number of scholarships and fellowships that Pakistan has received. Over the years and there have been numerous demands that the numbers be increased. Right at the inception of the programme a request was made by the GOP for additional scholarships (CSCM 25.10.1960). The CSC’s response was that even those scholarships that were being offered were not being availed by the GOP. Considering Pakistan’s request, the Commonwealth Scholarship Commission (CSC) minutes for October 1960 reflect on the first year’s experience and note that two scholars had to return and two scholars never turned up to take their scholarship places as they were not given exit visas by the GOP. The two scholars that had to return were summoned back by the government as they had been appointed to posts in the Pakistan Civil Service. One of the female scholars dropped out as she was getting married. Questions were raised about the GOP’s competence especially with regards to their request for scholars to return to take up government posts in the civil service. As the civil service examinations happened ten months before scholars were sent abroad giving GOP sufficient time awardees of their success or failure in the civil service examina-

tions, the question raised in the minutes is why this did not happen. It led to the curious situation where one government ministry was sending scholars to study abroad while another was calling them back to serve the country (CSCM 25.10.1960).

Nomination vs. Awards: There is some miscomprehension that the request for nominations equated to the number of awards that were available. This miscomprehension has not only been held by the GOP but also former scholars as well. The MOE partly contributes to this misconception because when it advertises its scholarships in the national media it highlights the number of nominations that will be sent to the awarding country, but does not clarify the number of awards that will be awarded. According to one MOE official, this is because “..we do so that we get enough students to apply” (Ahmed 2007). One scholar sharing his experience of the application process lamented about nepotism and how it led to poor selection of candidates. He attributes the latter to why only half or less of the 30 nominations in his year got selected for scholarships (Khan 2008).

In September 1991 the Minister of Education of Pakistan visited the CSC offices in London soon after Pakistan's rejoined the Commonwealth. The minute for this meeting notes that:

The Minister taxed us with the small proportion of Pakistani nominations which had been successful, and though he was reminded more than once of the CFSP-wide practice of seeking roughly twice as many nominations as an awarding country has awards to give, he declared himself disappointed that the ration of selection so the nominations was lower than 1:2. Speaking as Minister he declared a hope that Pakistan might work towards an 80% selection rate from among its own nominees; he was advised that this was inherently improbable, but that any country's presence within the plan was a function of the quality of the candidates which it proposed. Nor was it possible to respond with especial encouragement to plea for recognition that Pakistan had 17 years lee-way to make up.” (CSCM 8.10.1991:14)

The Minister's view reflects the broader perception that many more of those who got nominated would be awarded scholarships.

Institutions and subjects: There was some tension early on in the programme regarding which of the nominations were actually selected for awards and also what subjects and institutions nominees got accepted to. One issue was whether the selection of scholarships reflected the development objectives of the GOP. Selection in awarding countries of awardees may have reflected a number of criteria other than the simple hierarchical ranking undertaken by the MOE, including awarding countries' own priorities, acceptance into university programmes etc. Early on this tension came to the fore. In Pakistan's submission to the annual ARUK, the GOP states:

As already stated above the selection committee is composed of eminent educationalists and has a fair opportunity to evaluate the applications and to determine the requirement in various fields. It is felt therefore that no drastic changes should be made to the recommendations of this committee: the listed priorities should be given the highest consideration and the least number of changes contemplated since the list of priorities formulated by the selection committee of the country concerned, keeping in view the need of the country will be upset and that the standard of the successful candidates by leaving out some of the best candidates will be lowered. (ARUK 1961-1962)

This view is still held by some in the MOE as there is a feeling the awardees do not always comply with the government priorities. One MOE official notes “ We get what we do not want. Our job is to send nominations not ask for which fields. We have aspirations and expectations but we do not get them.” (Ahmed 2007). The concern is not always about subjects but also about institutions. In the early years of the CSFP there was a concern that not enough scholars were getting into the elite institutions of the awarding countries. Again as noted in the annual submission to the annual ARUK, the GOP notes “It is hoped that a great number of admissions can be secured at the universities of Oxford and Cambridge than has been done so far.” (ARUK 1961-1962)

7. The CSFP impact⁶

7.1 The “Commonwealth of Scholars”

The CSFP began in 1959 with the goal of establishing a network of study opportunities throughout the Commonwealth for students from the Commonwealth. How successful was it in achieving this goal for Pakistan, in terms of attracting students from other Commonwealth countries to Pakistan and having Pakistan students travel to a broad range of Commonwealth countries? How successful was CSFP in ensuring that Pakistanis became part of “Commonwealth of scholars” if by the latter what is meant is a community of scholars of the Commonwealth who formed a community and shared ideas across the Commonwealth? The evidence from Pakistan seems to be that the CSFP was successful in developing a group of scholars who returned back and who became an important part of scholarship in Pakistan, but there is little evidence that it created a community of Commonwealth scholars

From the beginning Pakistan welcomed the notion of having a scholarship programme which focused on all countries of the Commonwealth and was keen to attract scholars to Pakistan. In the very first year of the scholarship programme Pakistan asked for 16 nominations, predominately from the new Commonwealth countries. By 1962-1963, the number of nominations requested increased from 16 to 52 and a range of old and new Commonwealth countries were being asked to participate (see Table 1B). On average, during the first phase, Pakistan invited around 40 nominations but on average only received about 10 nominations a year. In terms of actual take up, at its height it was seven scholars, but over the whole first phase when scholars did take up awards, take up averaged around four scholars a year. In the second phase, when Pakistan rejoined the CSFP, Pakistan sadly no longer requested nominations from other Commonwealth countries. The reasons for this are not explicit but it likely relates to financing. Hence there was no opportunity to develop a Commonwealth community of scholars.

A common item in the communication between the GOP and the CSC in the first phase of the scholarship was the poor response to Pakistan’s request for nominations for awards in Pakistan (ARUK 1961-1962, 1969-1970). As the quote below notes there were numerous advantages of having Commonwealth scholars in Pakistan. As early as 1961-1962, the GOP annual submission to the ARUK notes that:

It is found that the response to the Pakistan Commonwealth Scholarships is not very encouraging in the more advanced countries.The Government feels that the presence of foreign scholars would help Pakistan universities in stimulating international co-operation in the vital sphere of research.. It would also be of advantage to the scholars themselves as such studies would broaden their knowledge and experience of a country like Pakistan. The Government is therefore anxious to develop particular fields of study which may be of interest to foreign students. (ARUK 1961-1962)

Another factor that did not cultivate a community of Commonwealth scholars was the poor acceptance rate of nominations made by Pakistan by countries, other than the advanced members of the Commonwealth. Besides Australia, Britain, Canada and New Zealand few of the other countries made offers of scholarships to Pakistan (ARUK 1968-1969). Although nominations were regularly invited from Pakistan from a range of Commonwealth countries (see Table 1A), three quarters of the offers made were made from the advanced Commonwealth countries. The other problem side of the same problem was that even the offers that were made to Pakistani students by the developing Commonwealth countries were just not taken up. For example, Jamaica, Hong Kong, and Sri Lanka consistently made offers of scholarships to Pakistan in the first phase of the CSFP, but never had any of their scholarships taken up (Table 2B and 3B). This would suggest that there clearly was a preference on the part of Pakistani scholars to travel to the advanced Commonwealth countries to study. This is also mostly borne out by the conversations with scholars during the author’s interviews. Many of them showed a clear preference for the UK, New Zealand, Australia and Canada and said they would have not considered going to the other Commonwealth countries for their studies. In the second phase of the scholarship in Pakistan, few of the developing Commonwealth countries offered scholarships to Pakistan with the exception of Malaysia, Brunei, Hong Kong, Nigeria and Trinidad and Tobago.

⁶ This section draws upon the interviews conducted by the author, as well as the CSC survey and other secondary sources. Although the interviews are referred to through out the text, summaries of the interviews are given in Appendix B.

7.2 Developing science and technology

The introduction of the CSFP scheme in 1959 was timely as it complied with the GOP's own initiative aimed at developing science and technology capacity in the country for the purposes of industrialization⁷. Although, a number of other scholarship programmes would subsequently over time play an increasingly larger role than the CSFP, the introduction of the CSFP at this time meant that it potentially could be used for this particular drive. The governments could influence the CSFP's orientation because during the selection process they made the first determination which applicants would be on the principal and alternate lists sent to awarding countries.

There is clear evidence as noted in Section 5 that the sciences dominated the distribution of subjects studied under the CSFP scheme (see Table 4). The domination of the sciences is clearly evident in the first phase of the CSFP and what little evidence there is on second phase of scholarship also suggests that this trend may have continued. The first phase of the CSFP correlated with numerous initiatives taken by the GOP to develop science and technology (S&T) capacity in the 1960s, while the second phase of the CSFP complied with the GOP own initiative, the HRDP under MoST, which aimed to build up S&T (see Section 3).

Whether the CSFP programme has had the desired impact on scientific development in Pakistan has to be first gauged vis-à-vis its share in contributing to human resource development programmes in the country. Second, one has to remember that human resource development is only one element in the process of scientific development and if the rest of the institutional framework is weak, its impact on scientific and technological development will be min among CSFP fellows and scholars interviewed for this project. As seen in Section 5, at its peak in 1994-1995, 44 students took up awards across all subject areas including S&T. How does this compare with other human development programmes offering awards at the time? The evidence available is from a period just before Pakistan rejoined the Commonwealth (1986-1990). This indicates that investment in human resources in S&T was quite high at the onset of Pakistan's return to the CSFP scheme (see Table 6). Even without CSFP in 1985-1986 the number of scholarships awarded for S&T at the postgraduate level equalled 746 while in 1986-1987 the figure was at 718. The figure for 1989-1990 is 371 which although not comprehensive for the whole year, is still significant. Comparatively the scholarships in CSFP in S&T are few and would not have had a broad impact (Naim, 1992). However, CSFP contribution to S&T development would have varied over time. Pakistan rejoining CSFP in 1989-90 happened at an opportune time and probably had a greater impact as it happened at a time when a number of other scholarship programmes were either stopped or ended. During 1990-1995, for example, USAID scholarships, which were significant in number were stopped because of USA imposed sanctions on Pakistan under the Pressler Amendment. Similarly, post 1995, the MoST's HRDP also ended because of a lack of budgetary support.

What impact would returning S&T graduates have on scientific R&D both at the macro and micro level? At the macro level it is difficult to determine the impact of the returning S&T graduates who came through CSFP scheme. Some insight can be gained from the experience of other similar programmes. An early assessment of the MoST HRDP programme was critical of its impact because of the lack of thought given to how the programme was set up (Naim, 1992). Some of these criticisms are worth reflecting on vis-à-vis the CSFP programme. One obvious issue is that investments in S&T human development can only deliver R&D if they are adequately supported by a critical mass of scientists, laboratories and other facilities to undertake research. In interviews carried out for this project there is quite a bit of evidence that scholars and fellows were not able to utilize their new skills because of the lack of equipment. Dr Akhlaq Malik noted for instance that "there was little continuity after I returned as I found little equipment. One manages to transfer material theoretically but not practically." In Dr Malik's case, he received the necessary equipment to carry out lab experiments in 2005, six years after he returned from his fellowship! Other scholars had similar stories. Another criticism made of MoST HRDP was that there was a lack of coordination with the other S&T human development schemes being implemented by the other donors. This was also likely in the case of CSFP. The implication of this is that dispersed investment across a wide range of scientific areas rather than a targeted few, led to dispersed impact (Naim 1992).

At a micro level, there are some clear examples of impact. Hoodhboy (2006), a leading academic scientist and intellectual in Pakistan has been extremely critical of Pakistani science and educational policy. He notes the one exception is that in defence technology. Pakistan has done relatively well in this area, most visibly in developing

⁷ Pakistan at independence in 1947 inherited a small tertiary sector. Between 1953-54 and 1960-1961, although the number of universities did not increase (remaining at six) the number of medical colleges increased from seven to twelve while the number of engineering schools increased from four to six. Most of this growth was happening in West Pakistan at the expense of East Pakistan (Asadullah 2006).

nuclear capacity. An important player in this has been Dr Noor Butt, a CSFP scholar who has played a very important role in the research wing of the Pakistan Atomic Energy Commission (PAEC), Pakistan Institute of Nuclear Science and Technology (PINTECH). Dr Butt travelled to University of Birmingham to undertake a PhD in 1965. He studied under three Fellows of the Royal Society, including being supervised by Professor Philip Burton Moon, himself a student of Professor Ernest Rutherford and a member Manhattan Project. He also had the opportunity to take courses with Dr R.E. Peierls as well as Professor W.E. Burcham, the foremost physicists of their time.

Upon returning to Pakistan after his PhD, Dr Butt joined PINSTECH in their Neutron Diffraction Group subsequently going on to become the head of group. Over the years he held numerous positions in the institution and he retired in 1996 as the Director General of the institution. Dr Khalid Ikram⁸ a colleague of Dr Butt who was also mentored by him argues that Dr Butt was critical in developing the research ethos of the PINTECH. Critical was his management style. He constantly led debates, was open to the exchange of ideas—there was no hierarchy and so research and development benefited from it. Dr Butt himself notes, “My purpose was to eliminate the “yes culture” and create an atmosphere where debate was encouraged” (Butt 2008). PINSTECH’s impact is profound. Its alumnae have gone on to populate all the major science R&D institutions in the country.

Given that 11 of the 17 scholars and fellows that were interviewed for this project are active academics in science higher education, the greatest impact is likely in the classroom and through mentoring. Dr Iqbal Memon for example, a medical doctor who travelled on a Medical Fellowship in 1994 to study techniques in anaesthesia talked about how the fellowship “introduced me to techniques I did not even know about” (Memon, 2008). First, Dr Memon was introduced to a new approach to patient care which was very different from anything done in Pakistan. Secondly, there were a whole set of techniques that he learnt including filter optic aware management, epidurals, laryngeal airway masks, and local blocks. Dr Memon was subsequently able to transfer these skills to other students in his new job as assistant professor of paediatrics and obstetrics at the Pakistan Institute of Medical Sciences (PIMS) in Islamabad, Pakistan. Dr Gul M. Khan, a senior academic in pharmacology who studied transdermal delivery of pharmaceuticals, is one of four people in country who has expertise in this area. He has had the opportunity to supervise a number of students (3 completed PhDs and 6 under supervision) in these techniques. One direct consequence of his PhD student’s research has been the development of an indigenous treatment for the parasite leishmaniasis. Under his supervision his students have developed a transdermal cream that treats this problem. Until now the treatment for this affliction is imported from abroad and can be costly. Currently the medication is being field tested and the university is in communications with a pharmaceutical company about production and patent rights.

There is also some evidence that the fellowships have been important in facilitating research collaboration between scientists in Pakistan and UK which have extended beyond the timeframe of fellowship and have paid dividends in terms of research publications. Dr Gul Majeed Khan’s fellowship in pharmacology allowed him to study at the University of Strathclyde which was one of the two foremost institutions in transdermal delivery of pharmaceuticals. The fellowship not only gave him the opportunity to study at Strathclyde, but also to interact with the other British university with expertise in the area, the University of Bradford. Since his return, with the help of the British Council, Dr Khan has been able to establish a university linkage between his university, Gomal and Bradford in this research area. Similarly, Dr Jadoon Khan, upon his return has been able to set up a similar institutional linkage with Nottingham University and NWFP Engineering and Technology University in his area of research which is international health and safety. All of the fellows interviewed who continued in academic careers have highlighted the importance of the fellowship in generating publications. Often the research was something that they were already working in before they left on their fellowship, but that time to focus only on research paid dividends in terms of publications. A large part of that was due to the ability to collaborate with international researchers and co-write papers with them. On average the fellows claim that one to two papers came directly out of the fellowship. Some continued to publish even after returning to Pakistan as their fellowships proved extremely productive in generating research. This was definitely the case for Dr Sadia Mansoor at Comcast.

7.3 The broader economy

It would be useful to know how many scholars the CSFP was supporting out of the total number of Pakistani students who were enrolled in the UK for instance. It is known from the data available for the years be-

⁸ The author came across Dr Khalid Ikram while interviewing Dr Noor Butt at the PCST

tween 1979-1984-- the period when Pakistan was not a member of the CSFP--that a large number of Pakistanis were still coming to study in the UK at this time. In 1979 for instance, there were 941 Pakistani scholars in publicly financed institutions in the UK, equalling 1.1% of the total foreign enrolment in this category in the UK at the time. In 1984, that figure stood at 705 students which equalled 1.3% of the total foreign students enrolled in publicly financed institutions in that year.⁹ The exit of Pakistan from the Commonwealth and the CSFP did not preclude Pakistan's inclusion in other bilateral funded scholarships supported by the British Government. In the year 1984/1985 for instance, 760 British Government funded scholarships were available to Pakistanis even without the CSFP, most of them available under TCTP (Overseas Student Trust, 1987). Similarly, other countries also had their own bi-lateral scholarship programmes, particularly the United States. This suggests that despite Pakistan's exit from the Commonwealth, human capital development was on-going in large numbers with implications for the Pakistani economy.

Hence, a similar argument to that made above about the CSFP's impact on S&T development can also be made for the programmes impact on broader economy. As it was argued above, given the small number of S&T scholarships financed by CSFP relative to the total in the country, it is impossible to discern the impact of these scholarships on science and technology development at a macro level. We can say the same about the CSFP and its impact on the broader economy—the numbers scholars and fellows under the CSFP were small relative the total human capital development going on both privately and publically making assessment of its impact impossible.

On very imperfect angle through which we can try and discern what the impact these scholars have subsequently had at an economic wide level is to look at their own responses on a specific question on the CSC Evaluation Survey which asks them about their influence at a policy level. The CSC Evaluation Survey has a question which asks respondents to identify particularly policy areas where they have influence and what type of influence they have--at the project level, policy level or at a broader socio-economic level (see Table 7). Although not representative, what the response to this question shows is that of the respondents, overwhelming, the largest impact of the respondents is in quantity and quality of education and scientific and research application. Next in importance is health. Other areas like agriculture /rural productivity, international relations are important but less so. Most identify that their involvement is project specific but in education the contribution is also significant at the broader socio-economic level. This is likely to reflect the opinions of the self-selected group who are active alumnae of the CSFP and who overwhelmingly represent the scientific academic community.

8. The CSFP experience

Whether scholars and fellows actually deliver on their potential and offer the dividends expected of them in terms of human capital is partly determined by their experience during the scholarship. Scholars and fellows interviewed and those earlier students whose records are available express an overall positive experience under the CSFP. The obvious positives relate to the impact the scholarship and fellowship have had on individual careers. More intangible are those externalities that are generated by the award delivered in the non academic sphere and the educational experience itself. There were also a number of limitations of the programme which are highlighted that indicated potential areas where improvements can be made to the CSFP.

Many of scholars and fellows emphasized their non-academic experience of their scholarship and highlighted how it was important not only for themselves but also for their families. One young man, whose scholarship took him from South Asia to Newcastle, talked about his exposure to the Geordies and what a pleasant experience it was. He notes:

Furthermore I must report that I enjoyed fully as a student of King's college, University of Durham at Newcastle on Tyne. Besides my academic pursuits I have had the most enjoyable social and cultural experience of my life here, which I shall always cherish. Geordies are very pleasant, sociable and hospitable people. S.M Hussain, M. Sc. Economics King's College Newcastle (CSCM 27.9.1962)

Another student in his yearly report notes the bucolic pleasures of England. He writes:

I must acknowledge I have learnt quite a lot besides crystallography. I think mere living in London is itself a great learning. And I consider myself lucky to have the opportunity of being here. By this time I have seen a few

⁹ This decline of 25% in this 1979-1984 is in keeping with the fall in aggregate number of students from the developing world (a fall of 30,000) and from the Commonwealth (which fell by 18,000) in this period (Overseas Student Trust, 1987).

places of England's countryside. The springtime England is really something to talk about. In short, there are many things in England to make one forget about its long and cold winter, short spring, etc. M.B. Hossain M.Sc. Crystallography, Birkbeck College London. (CSCM 27.9.1962).

Exposure to the ways of the English both in the academic and non academic setting can be very enlightening. Dr Memon, when talking about his fellowship talked a lot about how the experience opened his eyes to patient care. Just being able to see how patients were talked to, addressed, or facilitated was very revealing and he mentioned that this was something he brought back from his experience and tried to implement within Pakistan (Memon 2008). Dr Abdul Wahid, a fellowship recipient who went to England 2005, was most impressed by the collegiality of academic life in the UK, particularly the atmosphere of collaborative endeavours. Dr Wahid noted that "...when you go abroad you see such things that you constantly regret your existence here [Pakistan]. It was a great environment. People were honest, affectionate and very helpful. People stayed late and worked with me always helping me and working with me. There were lots of discussions" (Wahid, 2008).

Others scholars talked about what the exposure meant for their families. The ability to take their families abroad was overall seen to be very beneficial as it allowed families to remain together. Dr Akhlaq Malik, who went on a fellowship in 1999, highlighted how his children were exposed to different educational institutions which positively impacted their own learning. "The children attended school there and it had an impact on their language skills as well as their science skills." Dr Jadoon Khan, another fellow noted, "My family was exposed to the UK which is something we brought back with us. It was a very good experience" Of course, certain complication can arise if one takes family along. In one case, Dr Khalid Hassan, explained his wife's illness during his PhD prolonged the completion of his PhD. (Hassan 2008).

The ability to take family abroad with them on their studies was dependent on remuneration offered by CSFP. Many of the fellows and scholars interviewed expressed their satisfaction with the level remuneration. Dr Jadoon Khan noted that the "...the fellowship and scholarship allows you to comfortably take your family which is a great thing." Munaza Nausheen who is currently on another scholarship for her PhD in Australia mentioned that now that she has to financially manage on another scholarship, she realizes how generous the CSFP remuneration was! It seems the CSFP was highly sensitive to helping scholars and fellows smooth out consumption in periods of higher consumption. Dr Khalid Hassan noticed that "... the stipend arrived before Eid" as opposed to the normal time of the month. He assumes this was to help his family out at a time of higher expenses associated with Eid. Although, Dr Hassan found the enumeration sufficient, he did have to find other resources to supplement his studies as he was delayed in completing his dissertation. Dr Bashir partly funded his own studies because of the ambiguities surrounding his CSFP application and the delays he faced in receiving his scholarship. Dr Bashir Ahmed supplemented his income by doing tutorials at the American summer school programmes held in Oxbridge during the summers. His wife also worked which was helpful.

Scholars and fellows expressed varying levels of satisfaction with their university placements for scholarships and fellowships. Dr Khalid Hassan who did his PhD at the University of Bradford highlights how taking ownership of the application process is important in terms of placements and even the subsequent academic experience. "I had problems with my placement. However, I had not applied myself and I take partial responsibility. I feel if I had spent time looking at places I would have been better off. I did it because I had to do it [The PhD]" (Hassan 2008). Others were quite pro-active in ensuring that they got placed exactly where they wanted to be. Dr Bashir Ahmed for instance, was placed through the CSC at the University of Manchester. However he had already been at Oxford for year through self-financing when his scholarship finally came through. He was able to get his scholarship placement changed to Oxford after going through the necessary paperwork and having his supervisor and tutor at Oxford support his application (Ahmed 2008) Mr. Saeed-ullah Khan mentioned that he had no choice in which institution he ended up in but retrospectively it turned out to be a good choice. In his application he gave his preference for Oxford University or LSE. Instead, he got into Institute of Development Studies at the University of Sussex which ended up being an excellent place for development economics (Khan 2008). Dr Shahida Niazi, a former fellow, who went for a 10 month fellowship at the University of Strathclyde in 1992 mentioned that although the placement was appropriate—she was able to work with one of the key academics in her field—she found that not sufficient thought had been given to her housing situation. No arrangements had been made for her housing except that she was sent a list of possible housing rental agencies which was encouraged to contact when she landed in the UK. This proved quite a challenge for a single woman based in a relatively rural university in Pakistan who had not been abroad before. She stated that what proved indispensable was the Pakistani network at the University of Strathclyde which was able to help her find a room with an Asian household which was her preferred choice.

As to fellowships placements individual networks and initiative mattered. Dr Iftikar, a former PhD student at Cambridge, drew on his established links with his supervisor to set up his fellowship. "I had an understanding

with my supervisor at Cambridge. He had come to Pakistan after my PhD and we had been doing a project together. So I coordinated with him and thought it would be good to go there [Cambridge] to continue our work.” Similarly, Dr Akhlaque Malik returned to his alma mater, University of Birmingham to do his fellowship. Others who did not have previous networks from their PhD days but were pro-active setting up their research collaborations seemed to be in an advantageous position while applying. Sadia Mansoor who went on a fellowship in 2005 stated that when she applied she had already “...contacted people at various universities and had ... my acceptance before I went for the fellowship.” This she felt was to her advantage when she went for her interviews. Others like Dr Wahid used his ten year collaborative relationship with Imperial University to set up his fellowship.

Networks established during the fellowship or scholarship do prove important subsequently. As seen above scholars use the networks they establish during their PhDs and Mphils to establish relationships that prove fruitful to their subsequent research careers. CSFP scholars and fellows interviewed for this project seemed to have been quite successful at establishing research links which continue to be useful after they leave their fellowship or scholarship. Munaza Nausheen notes “...that I do maintain links with my supervisor but not with my class fellows.” She explains this by saying “... most my fellows students worked at the primary and secondary [education] levels and I worked at the higher education level.” Dr Mansoor has maintained her strong research links with Dr Kevin Grady at University of York supported by the fact that her institution Comcast has provided her with resources to continue working with them. She travelled to England in the summer of 2008 to finish her work with them which she began in 2006. She has continued to maintain contacts with the whole research group at York, as well as her old roommate. Dr Abdul Wahid similarly maintains strong links with researchers at Imperial where he undertook his fellowship. He also collaborates with other academics in other universities in the UK who he was able to interact with during his fellowship.

One factor that comes up repeatedly is the short length of scholarships and fellowships. Scholars even in the early 1960s argued that the limited or uncertain scope of their awards affected their scholarship. Part of the problem surrounded students who initially entered a diploma course or a MPhil but were uncertain if they would be able to transition to the subsequent higher level course. Others complained that from the beginning the stringent limits put on scholarships affected their ability to undertake good research. Mazharul Huq for instance, a PhD scholar in Theoretically Nuclear Physics who attended Durham University in the early 1960s notes that:

The scholarship is awarded for a period of two years and it may be renewed for a third year in exceptional cases. Students who come for a PhD. in any scientific subject may find it very difficult to complete their work within three years. (CSCM 23.9.1964:7)

The lack of certainty about extension of tenure could affect a student’s performance. Notes one supervisor of a Pakistani student:

I am inclined to feel that when a scholar is selected it should be made plain to him how long exactly he is allowed to stay in this country. This would give him the sense of security and would certainly have its beneficial effect upon his efficiency. He would be able to work with great concentration and peace of mind. (CSCM:25.051965)

More recent fellows have complained about how the CSFP fellowships have become shorter over time. Until 1999 most fellowship lasted a year, but subsequent to that, scholarships last about 6 months or less. One scholar, Dr Jadoon Khan reflected on his own fellowship experience notes that “Six months is not enough. It takes two months alone to settle in. It’s not enough time to get into the research. One cannot initiate research in that short time.” DrSadia Masoor concurs. She stated that the fellowship “...was seriously inadequate specially if a researcher was trying to begin a new research project.” In her case, she supplemented her CSFP scholarship with a HEC fellowship and stayed a total of 18 months to undertake her research which proved very productive.

9. Conclusion

The CSFP in Pakistan is a programme of long distinction and has over the years served Pakistan well in terms of helping the country develop its human capital development. Its distinction remains in that it was one of the firsts. The programme has had a chequered history in Pakistan because of Pakistan’s own turbulent relationship with the Commonwealth. Nevertheless over time the programme has had a significant impact on individualized scholars and fellows and particularly has played an important role in developing research scientists who go on to teach the new generation of Pakistanis. It has been more difficult to discern the programme’s broader impact on the economy.

Table 1A
Nominations Invited by Awarding Countries for Pakistan

Years	Britain	Canada	Australia	NZ	India	Sri Lanka	Ghana	Gambia	Malaysia	Nigeria	Cyprus	Sierra Leone	Jamaica	East Africa	Malawi	Rhodesia & Nyasaland	Honk Kong	Mauritius	Brunei	Trinidad and Tobago	Zambia	Total	
1960-61	40	16	3	5	4												2					70	
1961-62	40	24	5	5	4	3								@			2					83	
1962-63	40	24	5	5	2	3								2		3	2					86	
1963-64	33	20	4	5	2	3			2	2	3	2				3	2					81	
1964-65	33	12	2	5	2	3				2		2	2			3	2					66	
1965-66	33	10	2	5	+	3				2		2	2	2		3	2					66	
1966-67	33	22	2	3		3	2			2		2	2				2					71	
1967-68	33	12	2	3		6	2		2	2		2	2				2					68	
1968-69	33	24	2	2		6			2	2		2	2	2			2					77	
1969-70	33	24	2	2		6			2	2		2	2	2			2					77	
1970-71	33	14	2	2		3			2	2		2	2				2				2	64	
1971-72	33	20	2	2		6			2	2		2	2								2	69	
1972-73	33	12	2	2					2	2		2	2									55	
1973-74	45	22	4	2	2	6			2			2	2				2					87	
1991-92	40	20		3													3					66	
1992-93																							
1993-94																		3					
1994-95	35	4		3						2												47	
1995-96	35	4		3						4												46	
1996-97	35	9								4												48	
1997-98	35	5		4															2			46	
1998-99	30	6		4															3			43	
1999-00	30	14		2															2			48	
2000-01	50	8		2															3			63	
2001-02	50	6		2															4			62	
2002-03	32	6		2					2										5		2	49	
2003-04	54	6		2					2										7			71	

Source: ARUK

Table 1B
Nominations Invited by Pakistan for other Awarding Countries

Years	Britain	Canada	Australia	NZ	India	Sri Lanka	Ghana	Gambia	Malaysia	Nigeria	Cyprus	Sierra Leone	Jamaica	East Africa	Malawi	Rhodesia & Nyasaland	Honk Kong	Mauritius	Brunei	Trinidad and Tobago	Zambia	Total	
1960-61	10	6																					16
1961-62	10		3	3		3			3	3													25
1962-63	10	6	3	3	4	3	3		3	5				6		3	3						52
1963-64	5	3	1	1	2	1	1		1	2				2		1	1						21
1964-65	8	5	2	2		2	2		2	3				8		2							36
1965-66	10	5	2	2		2	2		2	3	2		2	9	2	2	2				2	2	53
1966-67	8	5	2	2		2	2		2	3	2		2	10	2	2	2	2			2	2	52
1967-68	8	5	2	2		3	2	2	2	2	2	2	6	2	2	2	2	2			2	2	44
1968-69	8	5	2	2		2	3	2	3	3		2		9			2	3				2	48
1969-70	8	5	2	2		2	3	2	3	3		2		9			2	3				2	48
1970-71	8	5	2	2		2	3	2	3	3		2		9			2	3				2	48

Source: ARUK

Table 2A
Nominations made to the Awarding Countries by Pakistan

Years	Britain	Canada	Australia	NZ	India	Sri Lanka	Malaysia	Nigeria	Cyprus	Sierra Leone	Jamaica	East Africa	Rhodesia & Nyasaland	Honk Kong	Malta	Mauritius	Brunei	Trinidad and Tobago	Total	
1960-61	40	16	3	2				8											61	
1961-62	40	23				1									1				73	
1962-63			5	4			2												11*	
1963-64	33	21	3	3		1	1	2					2						66	
1964-65	33	12						2			2			2	2				53	
1965-66	33	10	1	4			2					1							52	
1966-67	34	22	2	2				2			2			2					66	
1967-68	50	12						2			1								65	
1968-69	48	24	2	2			1				2			2					81	
1969-70	39	24	2	2				3			1			1					72	
1970-71	40	14	2	2		1					2			2					63	
1971-72	44	17	2	2			2												67	
1972-73	4		2	2															8	
1973-74																				
1991-92	38																		38	
1992-93	62	37	1					3						8					111	
1993-94	-																			
1994-95																				
1995-96																				
1996-97																				
1997-98																				
1998-99																				
1999-00																				
2000-01		8		2														2	12	
2001-02	50	6		1													4		61	
2002-03	29	6		1			10												46	
2003-04	54	6		1			17											7	85	
2004-05	30						2										2		34	

Note: Figure outlier due to limited reported data

Source: ARUK

Table 2B
Nominations made to Pakistan by Awarding Countries

Years	Britain	Canada	Australia	NZ	India	Sri Lanka	Malaysia	Nigeria	Cyprus	Sierra Leone	Jamaica	East Africa	Rhodesia & Nyasaland	Honk Kong	Malta	Mauritius	Brunei	Trinidad & Tobago	Total	
1960-61	4																		4	
1961-62					3	2													0	
1962-63	2					1						4							7	
1963-64	1	1				1					2	6		1		3			7	
1964-65	2			1		2						3				2			16	
1965-66			2	1		3						2				1			10	
1966-67								2	1										9	
1967-68																				
1968-69	2					2					4	4							6	
1969-70	2		1													3			12	
1970-71	2		2			2				2					3				11	

Source: ARUK

Table 3A
Commonwealth Scholarships take up in Awarding Countries by Pakistanis

Years	Britain	Canada	Australia	NZ	India	Sri Lanka	Ghana	Malaysia	Nigeria	Jamaica	East Africa	Malawi	Hong Kong	Mauritius	Brunei	Trinidad & Tobago	Total
1960-61	17	8															25
1961-62	22	11	1		1												35
1962-63	15	6	3														24
1963-64	18	14		1				1									34
1964-65	22	12	1						2								37
1965-66	20	5	2					1									28
1966-67	17	11					1										29
1967-68	25	3							1								29
1968-69	26	14	2	1													43
1969-70	26	8	1														35
1970-71	20	7	1														28
1971-72	17	7		1													25
1972-73																	
1973-74																	
1990-91	12																12
1991-92	12																12
1992-93	20	2	1														23
1993-94	9	10															19
1994-95	19		25														44
1995-96	9		13														22
1996-97	9		13														22
1997-98	16	4	2														22
1998-99	10	2	2	1													15
1999-00	10	3															13
2000-01	16	7		1													24
2001-02	1	1						1							1		3
2002-03	11	1															12

Note: 1960-1961 and 1961-1962 awards are from "accepted" while rest are "taken up"

Source: ARUK

Table 3B
Commonwealth Scholarships taken up in Pakistan by other Awarding Countries

Years	Britain	Canada	Australia	NZ	India	Sri Lanka	Ghana	Malaysia	Nigeria	Jamaica	East Africa	Malawi	Hong Kong	Mauritius	Brunei	Trinidad & Tobago	Total
1960-61																	
1961-62	1		1														2
1962-63	2																2
1963-64						1					2						3
1964-65		1				1				1	1	1	1			1	7
1965-66						1					3			1			5
1966-67						2					1			1			4
1967-68									1		1						2
1968-69	1			2		2					2						7
1969-70	1		1			1								2			5
1970-71																	
1971-72																	
1972-73																	
1973-74																	

Source ARUK

Table 4
Distiburtion of Scholarships Held* by Pakistanis by Subject

Years	Arts	Social Sciences	Pure Sciences	Technology	Medicine	Dentistry	Agriculture and Forestry	Total	Male	Female
1960-61	5	5	11	5	2			28	24	4
1961-62	8	9	13	17	5	1	4	57	52	5
1962-63	10	9	25	14	4	2	4	68	60	8
1963-64	15	11	36	15	6		2	85	74	11
1964-65	20	14	34	17	7		3	95	87	8
1965-66	14	18	28	15	4	1	2	82	75	7
1966-67	11	11	36	16	4	1	2	81	75	7
1967-68	10	8	33	21	9	1	2	84	74	7
1968-69	8	10	38	25	11		4	96	86	10
1969-70	7	12	32	27	9	1	4	92	85	7
1970-71	4	8	38	23	14	1	3	91	85	6
1971-72	3	6	35	26	13	1	4	88	80	8
1972-73	1	1	16	12	3		1	34	28	6
1973-74	1		7	5	1		3	17	14	3
1974-75	1		1		1		1	4	4	1
1990-91		4	6	1	1			12	7	5
1991-92		4	6	1	1			12	7	5
1992-93	2	11	13	15	1	3		45	35	10

Note:* This refers to the number of scholarships held in any given year rather than take up

Source: ARUK

Table 5
Distiburtion of Scholarships Held* by Pakistanis by Level of Qualification

Years	First Degree or Diploma	Second first degree or PG Diploma	Higher Degree/ Taught Masters**	Research/Research Masters**	Doctoral Degree**	Other University	Non-Univ Course	Total
1960-61								
1961-62		8	47	2				57
1962-63		9	59					68
1963-64	2	10	72			1		
1964-65		10	81				4	95
1965-66		4	76	2				82
1966-67	1	3	73				4	81
1967-68		2	74				8	84
1968-69		5	81				10	96
1969-70		4	81	1			6	92
1970-71		2	77				12	91
1971-72		10	78					88
1972-73			32			2		34
1973-74			17					17
1974-75		1	3					4
1975-76			2					2
<hr/>								
1990-91			12					12
1991-92			32	1				33
1992-93**			8		37			45

Note:* This refers to the number of scholarships held in any given year rather than take up

** In 1992-1993 a new classification was introduced; Higher degrees became taught masters
Research became Research Masters and a category doctoral degree was added

Source: ARUK

Table 6
Scholarships in S&T in Pakistan

	Phase I*	Phase II	Phase III**
	1985-1986	1986-1987	1989-1990
Projects			
Pakistan (HRD)	373	359	226
USA	191	196	78
UK	177	155	60
Australia	1	1	5
Canada	4	7	1
Other	0	0	1
TOTAL(Yr)	746	718	371

Notes: * Refers to phasing of the Pakistan's S&T HRD programme which complies with the given year

**Phase III does not include all scholarships awarded

Source: Naim (1992)

Table 7
Response to CSC Evaluation Survey on Areas of Involvement in the Economy

Areas of Policy	Involved in one or more specific projects in this field	Helped influence government thinking and policy in this field	Contributed to wider socioeconomic impact in this field	Total
Health	9	4	3	16
Agriculture/Rural Productivity	6	1	3	10
Quantity and Quality of Education	15	5	8	28
Governance	5	1	3	9
International Relations	6	1	2	9
Poverty Reduction	5	2	2	9
Social Inequalities and Human Rights	3	4	2	9
Physical Infrastructure	6	2	1	9
Environment Protection	5	3	2	10
Conflict Resolution/Humanitarian Assistance	3	1	2	6
Scientific and Research Application	17	4	6	27
Job Creation	7	1	2	10
Other Leadership/Development Priorities	1	1	1	3

Source: The CSC Evaluation Survey for Pakistan

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Interviews

(list omitted from this version)