

INDIA: THE COMMONWEALTH SCHOLARSHIP AND FELLOWSHIP PLAN

**Surinder S. Jodhka
Dhruv Raina**

School of Social Sciences
Jawaharlal Nehru University

Von Hügel Institute, St Edmund's College, Cambridge

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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
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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.

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 Nuffield Foundation were used to pay for this report.

Hilary Perraton
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Introduction

India has often been called a land of contradictions. These contradictions are apparent in virtually every sphere of Indian social life. For example, in terms of its per capita income, India continues to be a poor country with more than 20 percent of its population still living below the poverty line and it is also being seen as an emerging economic power of the world today. Similarly, according to the *Human Development Report (2006)* prepared by the United Nations Development Programme India stood at 126th position in a list of 177 countries in terms of its 'human development index value' but it is still an important example of a thriving system of democratic governance. India has been witness to some of the worst cases of ethnic and communal violence in the recent past, but it would be difficult to ignore its achievements in terms of its ability to accommodate enormous social and cultural diversities within a framework of democratic polity. Education too presents a similar scenario. While nearly one-third of its population cannot even read or write in any language, India is home to one of the largest pool of technically educated skilled human labour. Even in terms of quality of training and education, some of its institutions of higher learning are ranked among the best in the world.

India has a very large system of higher education. According to a recent report of the Ministry of Human Resource Development, in the year 2004-05 India had a total of 407 recognized Universities or equivalent "Institutes of National Importance". The number of colleges for general education was 10,377 and for professional education 3,201¹. Though in proportional terms only a small number of Indians in the relevant age group manage to enter and stay in these institutions, the absolute number of those who pass out every year with degrees in higher education is quite large.

Apart from the systems of regional and national education, a large number of Indian students also join universities and colleges abroad every year. Traveling abroad for higher education has been an old tradition in India. It was during the period of British colonial rule that a small section of the native elite began to enroll in universities in England, and occasionally elsewhere in the western world for higher education. With the expansion of the Indian middle classes and growing educational infrastructure during the post-independence period the number of students proceeding abroad to pursue higher education has multiplied manifolds.

Over the years destination and disciplinary orientations of the Indian students have also changed quite significantly. During the colonial period, a large majority of those who went abroad joined universities and colleges in Great Britain. However since then the numbers have decisively shifted towards the United States of America. For example, of the 87,987 Indian students studying in foreign universities in the year 2001-02, nearly 76 percent were in the United States, followed by Australia (10.84 percent). The United Kingdom came in at number three, accounting for 6.84 percent of all the Indian students studying abroad.²

Similarly, in the past students exhibited a preference for the humanities, arts and law courses. Today the majority opt for courses in the engineering sciences, medicine, the sciences proper and of late commerce and management. For example in the year 1998-99 only around 10 percent of all the students in higher education courses were pursuing courses in the arts and related disciplines. More than one-third of them were studying business, commerce or banking and the rest (more than 50 percent) were in the different science and technology related courses³.

As would be expected, in terms of their socio-economic profile a large proportion of those who pursue higher education abroad come from different sections of the Indian middle classes and more than 80 percent of them are male. While a small proportion of these students can afford to pay for their education with the support they receive from their families, a large majority of them can do so only if they are able to manage a Scholarship/ Fellowship. However, of late new financial institutions such as banks and foundations do provide educational loans for study abroad. But this is a very recent development in the Indian economy which is not even a decade old.

The Commonwealth Scholarship and Fellowship Plan (CSFP) has been one of the most stable and popular sources of funding higher education abroad with Indian students. Though a proportionately small number of Indian students are funded by the CSFP, over the decades students from across the country have been applicants.

¹ *Annual Report 2006-07*, Ministry of Human Resource Development, Government of India, New Delhi. 2007.

² Source: *Department of Secondary and Higher Education*, Ministry of Human Resource Development, Govt. of India.

³ Source: *Indian Students/Trainees Going Abroad 1998-99*, Ministry of Human Resource Development & Past Issue, Govt. of India.

This study is an attempt to understand the working and impact of CSFP in India. The report has three main sections. In the first section we propose to deal with the historical context of the Commonwealth Scholarship and Fellowship Plan (CSFP) in relation to the development of higher education and research in India. We will focus specifically on the intersecting priorities of the post-colonial developmental state and the international agencies in the field of higher education. The second section would involve an empirical study of the CSFP system, based on a quantitative survey and qualitative interviews/ case studies of the relevant actors involved with the system at different levels. In the third and final section we propose to connect our historical investigation of the CSFP system with findings of the fieldwork. We will try to see how the CSFP system has helped India in strengthening its human resource capabilities.

1 The historical context of higher education in India

1.1 Introduction

The modern institutions of higher education in India were jointly shaped by colonial imperatives and the anti-colonial nationalist struggle. The first modern universities were established in India in 1857 in the so-called Presidency towns of Bombay, Madras and Calcutta. A few more were subsequently established. These first generation universities were largely teaching-universities that produced manpower for efficient management of the empire.

However, within a decade and a half of their foundation, members of the newly educated class began pressing for the inclusion of a research orientation to the higher education system in India, and proceeded to establish a research institute through private and public contributions – the Indian Association for the Cultivation of Science. Thirty years of struggle followed and in 1904 the University Charter Act was passed that permitted post-graduate teaching and research. The second-generation universities established in the early decades of the twentieth century were created as residential, teaching and research universities. In that sense, the institutionalization of the system of higher education in India commences in the early decades of the twentieth century.

The next milestone was the process of decolonization that commenced with the end of colonial rule. This process of decolonization in India was never seen as one of dismantling the educational structures that had been put in place during the period of colonial rule, but of reworking the agenda of the post-colonial nation-state within these institutional structures.

Reflection on the post-colonial shape of the system of higher education had commenced well before India achieved its political independence of colonial rule. Thus between mid-November 1943 and early April 1944, the distinguished Professor A.V. Hill traveled through twelve Indian cities and prepared a well known report on the organization of scientific endeavour as part of the post-war reconstruction (a euphemism surely) and the coordination of these activities between India and Britain⁴. This sympathetic report provided a number of practical proposals that for sometime provided the template for the debate on structuring science and higher education in India. The 1950s and 1960s was the crucial period in the institutionalization of the system of higher education directed towards building the human resources of the sovereign Indian nation-state. In order to accomplish this task several international agencies and governments participated in the task of promoting educational infrastructure and human resource capabilities. UNESCO emerged as one of the key players as its focus on international collaboration enabled it to keep the dialogue open between both sides of the iron curtain, on the one hand and the developing and the developed world on the other⁵. International collaboration did not merely entail collaboration between research teams, but providing facilities and resources for training and research and exchange of scholars and students. Just as UNESCO took upon itself the task of bridging the human resource gap between the two worlds with special reference to science and technology, the Colombo Plan was intra-governmental organization dedicated to the development of human resources. Consequently, a number of agencies such as the Rockefeller Foundation, the Commonwealth Science Foundation and the Commonwealth Scholarship and Fellowship Plan fed into the developmental agenda of the Indian state.

⁴ Hill, A. V. 1944. *Scientific Research in India*, Government of India Press: Simla.

⁵ Elzinga, Aant. 1996. "UNESCO and the Politics of Scientific Internationalism", in Aant Elzinga and Catharina Landström (Eds.), *Internationalism and Science*, Taylor Graham, pp. 89-131.

1.2 Structure and differentiation

There are several frames available for studying the evolution of higher education in Modern India. The standard model proposes the transplantation and cloning of British institutions and organizations such as the university on South Asian soil. The anti-colonial nationalist critique of the cultural imperialism of the colonizing power engages with the emergence of modern institutions against the backdrop of the erasure of pre-modern institutions. Post-colonial theories on the other hand depart from percolation models and portray a reality that is far more nuanced and is premised on notions of the reinvention of modernity and more recently on multiple modernities.

Nevertheless, studies on the impact of higher education in twentieth century India need to engage with the context of the emergence of the institutions of higher education. This entails in addition an exploration of the variety of universities and research institutions. These institutional structures patterned on Western institutions were established during and after the period of colonial rule and were subsequently domesticated to the Indian environment⁶. First established in the early half of the nineteenth century, some of these modern institutions of higher education are probably the oldest institutions of the type in the Third World. Over the last one hundred and fifty years India has developed a fairly large system of higher education in the Third World, even though voices today suggest that it is inadequate for India's current population. The experience of combining scale with processes of domesticating the Western form of the university has provided many lessons and exemplars for Third World nations⁷.

However, contrary to the popular idea that the Indian system of higher education is merely a clone of the British educational system existing during the period of colonial rule is to miss the process of the evolution of the university in India and the spirit of Eric Ashby's marvelous work. Ashby points out that the ontogeny of medieval higher education plays itself out again and again, in other words that there is a structural replication of the process of domestication of the system of higher education. There are several stages in the ontogeny of higher education in the developing countries. Thus for example:

- Students of a "developing country" travel abroad due to the absence or scarcity of universities.
- This creates a pressure for indigenous education, resulting finally in the creation of a university as a "facsimile of some prototype".
- The university eventually contributes to society by ensuring that human affairs are administered by educated men.
- The new feature of this process of replication is that national forces play a very important role in adapting the university to national needs⁸. In other words extending Ashby's argument, the cloned university is not isomorphic with the original but undergoes a process of differentiation.

The East India Company (EIC) was drawn into the debate of educating Indians in the early half of the nineteenth century. Three primary questions of educational policy at the time were:

- Should the EIC encourage Western or oriental learning
- Whether the medium of instruction was to be English, a classical oriental language or the vernacular
- Was mass education to be preferred to schooling for the elite⁹.

The famous Macaulayan minute of 2nd February 1835 reduced these three issues to a decision concerning "the medium of instruction to be adopted in higher education to be financed by the government"¹⁰. The debate was closed by Bentinck who was influenced by Benthamite and utilitarian ideas by ruling that:

...the great object of the British Government in India was henceforth to be the promotion of European literature and science among the natives of India... all the funds appropriated for the purpose of education would be employed on English education alone¹¹.

⁶ Erich Ashby, *Universities: British, Indian African – A Study in the Ecology of Higher Education*, Weidenfeld and Nicolson, 1966, pp. 54-166.

⁷ Philip G. Altbach, "The Dilemma of Change in Indian Higher Education", *Higher Education*, 26, 1, 1993, pp. 3-20.

⁸ Ashby, 1966, p.5

⁹ Aparna Basu. 1981. *Essays in the History of Indian Education*. Concept Publishing Company: New Delhi, p.4

¹⁰ Basu, 1981, p.5

¹¹ Bentinck quoted in Basu, 1981, p.6

The project was naturally motivated by the imperative of governing and administering the British Empire in an efficient manner. Furthermore, a grave financial crisis at the time prompted Bentinck to employ Indian subordinates in the judicial and revenue services and hence economise on the high pay of English officials. The recruitment of Indians into tasks performed by the company would not only improve the finances of the company but strengthen the commitment of Indians to British rule¹². Thus different actors and agencies had different interests in the spread of Western school and higher education. The table below summarises the interests of different actors:

East India Company	To produce clerks and officials who could be employed cheaply
Free traders	English educated Indians would develop English tastes and thereby create a market for English goods
Missionaries	New education was the first step towards conversion to Christianity
Liberals	The civilizing and human influence of Western learning

Hence Basu points out that the introduction of English education was a combination of “complex economic, administrative, political and religious motives”¹³.

From the perspective of the spread of universities, there have been four waves of intellectual colonisation. The third wave of this colonisation peaked in the middle of the nineteenth century when universities were first founded in non-Christian societies and in the process supplanted ancient indigenous centres of learning¹⁴. In the eighteenth century the deeply rooted indigenous systems of education of the Hindus and Muslims were, according to one historiography, in a state of decline. Initially, the officials of the East India Company tended to support these systems under a modern format by founding the Calcutta Madrasah in 1781 and the Benaras Sanskrit College in 1792; other endeavours were initiated in Poona and elsewhere¹⁵. But this policy was challenged in England with the passage of time by the evangelicals, liberals and utilitarians.

Thus with the founding of the colonial state in 1857 most of the sub-continent came under direct British rule, while the remaining portion was referred to as indirectly administered India comprising the “native states”¹⁶. However, it needs to be pointed out that modern institutions such as colleges and research institutes such as the Asiatic Society were established in India at least half a century before the formal inauguration of colonial rule by the East India Company¹⁷. Thus the first universities established in India in 1857 were “examining universities” modeled on London University, that in turn became a “teaching university” in or around 1900. We shall not get into the question of why out of the five genres of British universities¹⁸ only London University served as a model for export to India in the mid nineteenth century. The university was a concretisation of the ideas of utilitarianism that in turn was an important influence on the newly modernising Indian professional class.¹⁹ While the first generation universities India founded in the nineteenth century were established under the rubric of nineteenth century utilitarianism, in the early twentieth century there arose the demand among Indians to transform the university into a teaching body and to extend its charter to that of a research institute as well. As happened in Europe, the “selective influence of national ideas”²⁰ resulted in the differentiation of universities in the twentieth century. At least as far as Europe is concerned this crystallised in the creation of national academic styles and traditions of “national science”.

One of the many imperatives of colonial rule was to create a new class of Indians who would participate in the governance and administration of the empire. Imperatives such as these resulted in the creation of the first generation modern universities in the presidency towns of Bombay (Mumbai), Calcutta (Kolkata) and Madras (Chennai) – all three are celebrating the hundred and fifty years of their founding this year. These first generation universities were not teaching universities but examining bodies administered by educators from England; and the focus of the teaching programme of the universities was on literary and humanities studies. Within a decade and a half this programme oriented towards the production of a new bureaucratic order gave cause for much resentment, and the newly educated class first began to plead that a scientific and technical education be incorporated into the Charter of the university. This plea gradually turned into a demand even while voluntarist associations

¹² Basu, 1981, p. 6.

¹³ Basu, 1981, p. 7

¹⁴ Ashby, 1966, p.20

¹⁵ Basu, 1981, p.1.

¹⁶ Bjørn Hettne. 1978. *The Political Economy of Indirect Rule: Mysore 1881-1947*. Malmo: Curzon Press.

¹⁷ Zaheer Baber. 1996. *The Science of Empire: Scientific Knowledge, Civilization and Colonial Rule in India*, New York: State University Press.

¹⁸ Ashby, 1966, p.22

¹⁹ Eric Stokes. 1959. *The English Utilitarians and India*, Oxford University Press: London.

²⁰ Ashby, 1966, p.7

such as the Indian Association for the Cultivation of Sciences were founded to promote science education on national lines and under national management²¹.

The colony was gradually transformed into a laboratory for scientific and technical experimentation and some of the early experiments on technical education had their first run within the colonies. England itself had few technical schools in the 1850s like the one in Glasgow.²² But technical education was a pressing requirement for the efficient management of the empire and the Thomson College of Engineering, Roorkee, was established to train professionals to develop and maintain civil works, bridges and networks of irrigation.

The new urban intelligentsia produced by this system of higher education comprised administrators, civil servants, professionals, social and political leaders and reformers. They became vectors of the process of modernisation.²³ By the early twentieth century with the spread of university education, "higher education" itself came to be seen amongst colonial officials as the root cause of politicisation of the newly educated class and the spread of seditious ideas and movements.²⁴ The dissatisfaction continued to mount during the decades 1880 to 1910, with last of these decades being politically the most eventful. A new urban consciousness was manifest within this newly educated class. One of the preoccupations of this class was to comprehend the cause of "Indian underdevelopment", in a manner a response to the cultural imperialism orchestrated through the colonial educational system.²⁵

Similar considerations resulted in a search for alternatives to the colonial policy of governing the empire which in turn would have to be guided by a different system of education. In the distressing years following the partition of Bengal, the National Educational movement inscribed within the National Council of Education would take off.²⁶ Part of this endeavour entailed a search for other models of the university. Increasingly, the idea of the teaching and the Humboldtian idea of the teaching and research University gained wide currency. The movement for the establishment of what may be referred to as the second generation universities in India, that departed from those modeled on London University commenced in the second decade of the twentieth century. The idea of having a system of higher education under a national management and on national lines was spreading. It is in this developmental context that the system of higher education was domesticated to the national context. Two important outcomes of the struggle that was waged over several decades expressing dissatisfaction with the university system were the University Charter Act of 1904 permitting post-graduate teaching and research in the university, as a result of which Indian history and culture began to be reflected more visibly in the curricula and the demand for courses in science and engineering became more pressing²⁷.

In fact, several models of the university presented themselves in the first two decades of the twentieth century. One of these was that of the denominational university. The latter half of the nineteenth century witnessed the disruption of age-old coalitions between different religious and linguistic communities, as linguistic and religious identities were collapsed in parts of Northern India. Processes unleashed by modernization under colonial rule produced threat perceptions amongst Hindus and Muslims as each side saw the other capitalizing upon the benefits of the colonial state. Out of these threat perceptions emerged the movement for the denominational college and university that were devoted to the development of respective religious communities²⁸. The idea was opposed as much by colonial officials as it was amongst sections of the modernized Indian educated class. These universities were nevertheless established and over the decades they certainly played a role in providing a home for separatism as they did for creating a nationalist class. More importantly Aligarh Muslim University and Benaras Hindu University developed good departments for the sciences and engineering over the years.

Thus a number of factors combined to produce a transformation in the system of higher education towards the early decades of the twentieth century. The emergence of a large unemployed intellectual proletariat by the end of the nineteenth century had resulted in the rise of militant nationalism and in Calcutta combined with the reac-

²¹ Dhruv Raina and S. Irfan Habib, *Domesticating Modern Science: A Social History of Science and Culture in Colonial India*, Tulika Books, 2004.

²² Roy Macleod, and Russel Dionne. (1979). "Science and Policy in British India, 1858 -1914: Perspectives on a Persisting Belief", *Proceedings of the Sixth European Conference of Modern South Asian Studies*, Colloques Internationaux du CNRS, Asie du Sud: Traditions et Changements. Paris: CNRS.

²³ Basu, 1981, p.21

²⁴ Basu, 1981, p.11

²⁵ Krishna Kumar. 1995. *Political Agenda of Education: A Study of Colonialist and Nationalist Ideas*, Sage Publications.

²⁶ Sumit Sarkar. 1975. *The Swadeshi Movement in Bengal*, PPH, New Delhi .

²⁷ See the first two chapters of Section Two of Raina and Habib, 2004.

²⁸ Leah Renold. 2005. *A Hindu Education: Early Years of Benaras Hindu University*, Oxford University Press: Delhi; Le-lyveld, David. 2003. *Aligarh's First Generation: Muslim Solidarity in British India*: Oxford University Press: Delhi.

tion to the partition of Bengal that led to the creation of an alternative to Calcutta university, that later became Jadavpur University. Secondly, there was a demand for trained professionals from India's emerging industrial class, as well for the modernizing Indian state. Furthermore, the transition from the end of the nineteenth to the early decades of the twentieth century has been seen as one where the laissez-faire colonial state of the nineteenth century become an interventionist one that was responsible to its citizens²⁹. This entailed that the state had to negotiate the demands placed before it by its citizens, albeit they were colonial subjects. This was particularly so in the realm of higher education.

The University Charter Act of 1904 legitimated the scientific research activities of the university staff. Before the passing of the Act these activities were carried out surreptitiously since they were not considered to be among the duties of the university staff. From an early state of blind admiration for this body called the university, a state of disenchantment emerged by the early decades of the twentieth century and found its expression in a new generation of universities founded only partially with government funding. The growth in higher education after the establishment of the first three universities in 1857 was steady but slow. With the transfer of education to limited Indian control between 1921 and 1947 the pace of growth of higher education picked up very rapidly, though the rate of growth was not uniform across the South Asian region, varying from region to region³⁰, as well as between groups.

The second generation universities were set up and mushroomed throughout the country in the decades before the Second World War. These universities were residential and teaching and/or research universities established through private donations and grants from local rulers, landlords and industrialists. Often enough the states also contributed to these endeavours. Thus the state of Mysore actively seeded the Mysore University; on the other hand a tripartite agreement was signed between the Maharajah of Mysore, the industrialist Jamsetji Tata and the British Government of India that resulted in the foundation of the Indian Institute of Science again in the first decade of the twentieth century. This continues to remain one of India's premier research institutes in the sciences and was inspired by the model of Johns Hopkins University, Baltimore. Similarly, in the domain of technical education during these very years, the idea was mooted that technical institutes modeled on the Massachusetts Institute of Technology institutes were absolutely essential for the industrial development of the country. But the idea did not materialize until the early decades of the post-independence era, when the Sarkar commission decided to establish the five Indian Institutes of Technology³¹.

1.3 Education and nation building

The idea of the "developmental state" propelled as it were by a network of variety of scientific and technological institutions more or less began to pick up with the setting up of the Indian Industrial Commission in the second decade of the twentieth century as questions of the state of industrialization became pressing³². In fact some of the leading industrial houses such as that of Tata had entertained the idea of founding research institutes that would train the professionals for their industrial ventures. During the First World War there was a loosening of restrictions on the transfer of technology and a demand to set up research and development facilities in order to find substitutes for critical products and materials³³.

In the 1930s the National Planning Council was established to begin planning for India's scientific and industrial future envisaging the possibility that India would soon become independent of colonial rule. These deliberations from the 1930s and 40s prepared the ground for higher technical education and research for the period after the formal passing of colonialism. By this time of course, most scientific and technology related research was principally pursued in the disciplinary departments within the university context. These departments were spread out across the first and second generation universities; and at the time it could be suggested that these departments existed at the universities in Calcutta, Bombay, Benaras, Aligarh, Mysore and several others. Within these university departments there was a growing appreciation of the need for the professionalisation of the still nebulous scientific research communities. Several of leading Indian scientists of the time had either studied with physicists and chemists at Cambridge and other British and European universities or were networked with them through

²⁹ Sarkar, 1975; see section two of Raina, Habib, 2004.

³⁰ Basu, 1981, p.15

³¹ Saroj Bangaru. 2004. "Debates in Technical Education: A Prelude to the Foundation of the Indian Institutes of Technology :: (1930-1950)", *M.Phil. Dissertation submitted to Jawaharlal Nehru University*, Jawaharlal Nehru University.

³² Benjamin Zachariah. 2005. *Ideas of Developing India: A Social and Intellectual History*. Oxford University Press.

³³ Aparna Basu. 1991. "The Indian Response to Scientific and Technical Education in the Colonial Era: 1820_1920", in Deepak Kumar (Ed.), *Science and Empire: Essays in Indian Context*, Anamika Prakashan.

collegial ties of the discipline. These collegial ties, and their proximity to scientists of the Cambridge Left such as Bernal, Haldane, Blackett and others, otherwise quite sympathetic with the Indian nationalist cause, ensured that the debates on science policy and planning were quite lively and germane to the developmental and political climate of the times.³⁴ In other words, they were quite aware of not only the unwritten contract that science needed to work out with the state but equally during the war years of the rise of the phoenix of big science.

The rise of big science and mission oriented research re-oriented the perspective of some of these scientists, some of who had been decorated with the Fellowship of societies and awards from the centres of scientific research, to reviewing whether the university should be considered the only centre for the production of scientific knowledge and technological know-how. This resulted in a situation where institutes pursuing research at the frontiers of science were veritably carved out of carefully groomed research departments in universities. Thus the research system differentiated into research institutes and universities.³⁵ During the post-independence period some of these research institutes acquired the status of institutes of national importance and their funding was delineated from the funding of the universities. This differentiation resulted in an elite stratification of higher education and research, and was particularly evident in the world of the sciences. The establishment and maintenance of these institutes were legitimated in terms of national sovereignty and self-reliance of the newly independent nation. In the climate it was felt that constructing systems from below was too time consuming and that leap-frogging in order to catch up with the developed world was the need of the hour. The elite structure of higher education offered a mechanism for ensuring that the independent nation did not lapse back into a state of neo-colonial dependency.³⁶

This differentiation did not appear in the social sciences well into the 1960s when there was a perceived crisis in the social sciences. Again as happened with the sciences, the structural response was to differentiate the structure of higher education by creating specialist institutes for the social sciences while the traditional disciplines continued to evolve within the academic environment of the university. Again in both contexts the justification was that the university was slow to responding to social demand or the demands of the market and that over the decades it had acquired a structure which to put it mildly had become unwieldy. On the other hand there were central and state universities, with the state level universities being supported in part by the state and in part by special assistance programmes, On the other hand, the central universities were supported by the centre and were to have a sort of national character. In addition to which there existed the elite Indian Institutes of Technology whose goal as it were was to provide an elite cadre of engineers and technologists to spear-head the drive to technological modernisation and industrialisation.

The 1970s was the decade when the optimism of the Nehruvian era and its faith in the transformative potential of science to usher in the era of prosperity and freedom from disaster began to be challenged. Within the paradigm of the sciences itself this change in perception was explained in terms of the dysfunction of the science and technology system and its lack of connection with the system of industrial production. The new era was marked by the beginning of the privatisation of education especially in the domain of professional education, which translated into that of engineering and medical education. The mushrooming of these private engineering institutions in the 1970s and 80s in several states of India produced a boom in technical manpower, whose effects began to be realised in the 1990s. The All India Council for Technical Education served to maintain, inspect and insure standards at these private engineering colleges which were affiliated to state level universities. In effect, the 1990s was the decade of both crisis and reform in the system of higher education. It is against this institutional background that we approach our problematic.

2 Fieldwork and the sources of data

2.1 Conceiving the field and the fieldwork

The empirical work on this report began with an examination of the *Directory of Commonwealth Scholars and Fellows 1960 – 2002* prepared by the Association of Commonwealth Universities (2003). Of the 3304 Scholars

³⁴ Robert S Anderson. 1999. "Peter Blackett in India: Military Consultant and Scientific Intervenor, 1947-1972 – Part One", *Notes Rec. R. Soc. Lond.*, 53 (2), 253-273.

³⁵ Dhruv Raina and Ashok Jain. 1997. "Big Science and the University in India", in John Krige and Dominique Pestre (eds.), *Science in the Twentieth Century*, Harwood Academic Publishers, pp. 859-877.

³⁶ *Ibid.*

and Fellows who had been awarded Fellowships or Scholarships under the CSFP during this period, the directory had details of 240 with their current mailing addresses and e-mail ids.

We prepared a questionnaire with a total of 40 questions covering different aspects of their experience abroad on the Scholarship/ Fellowship and their perceptions of the Programme. Of these, 34 questions were structured and the remaining six open-ended. During the second week of April 2007 the questionnaire with a letter explaining the purpose of the research was e-mailed to all the 240 Scholars/Fellows whose e-mail ids were listed in the *Directory*. Unfortunately, more than one-third (around 100) of these e-mails bounced back. However, those who are active users of e-mail and internet responded promptly to our mail and we began to receive completed questionnaires in good time. Some promised to send the questionnaire but had to be reminded several times before they obliged.

Given that not everyone responds to requests to complete a mailed questionnaire, we realized that a sample of 140 may not be enough for a viable questionnaire study. We approached the local office of the British Council and they were very helpful and provided us the contact details for another 34 Scholars/Fellows. We also searched the web for names listed in the *Directory* and we were able to identify another 30 addresses. The questionnaires that had bounced back were also re-sent to the Scholars/Fellows by snail mail to the available postal addresses. By the end of May we had approached more than 300 Scholars/ Fellows. Of these we had some information about 288 Scholars/Fellows. The response on the whole was not too bad. By the first week of August we had received a total 106 filled questionnaires. Using SPSS, responses to the relevant questions were tabulated and cross tabulated.

In the meantime we also interviewed some of these respondents. The interviews were conducted in Mumbai in western India; in two towns of Kerala (Thrissur and Trivandrum) and in Bangalore in the south of India; in Chandigarh and Ludhiana in the north of India; in Calcutta in the east of India; and in the national capital of Delhi. A total of 29 Scholars were interviewed during May – July 2007. A few interviews were also conducted with the senior academics and the former and current heads of institutions, some of whom had also been part of the selection panels of the CSFP selection committees.

We also spent a few days in the office of the Universities Grants Commission, New Delhi, looking at the relevant files concerning the Programme. The UGC has a separate section that looks after different exchange programmes with different countries in the field of higher education. However, only the last sixteen years records were available. We were informed that the records before 1990 were destroyed for lack of storage space. The officer in-charge of the programme and the assistants also keep changing. They were quite frank in admitting their lack of knowledge about the past of the CSFP.

Similarly, the Ministry of Human Resource Development (HRD) has a ‘section’ dealing exclusively with the CSFP. There are a total of seven assistants working in this office. We spoke to them about the working of the programme and also looked at some of their files. Apart from the office assistants in the section, we met some of the senior officers who look after the ‘section’. We also interacted with the local office of the British Council at various stages of the research.

3 CSFP in India

3.1 The beginning

The Commonwealth Scholarship and Fellowship Plan (CSFP) was initiated by the Commonwealth Scholarship Commission, a non-Departmental Public Body set-up by the British Parliament in 1959. The awards are funded through the Department for International Development (DFID), which supports awards for developing Commonwealth countries, and the Foreign and Commonwealth Office, which supports awards for other Commonwealth countries. The Commission Secretariat is supported by the Association of Commonwealth Universities (ACU), based in London.

India was one of the first countries to become actively involved with the Fellowship/Scholarship Plan. The first batch of 54 Scholars/Fellows went from India in 1960 to pursue higher studies, of which 36 went to the United Kingdom, two to Australia, two to New Zealand and fourteen to Canada. Another 37 Scholars went to the United Kingdom in 1961 and the same numbers of Scholars/Fellows were awarded in 1962. The number of Schol-

ars/Fellows going to Canada increased substantially to 19 in 1961 and 20 in 1962. Australia and New Zealand continued to be small players. Two Scholars from India also went to Sri Lanka in 1961. This flow of Scholars and Fellows from India to the other countries of the Commonwealth for higher education has since continued at a regular pace. During the period 1960 to 2002 a total of 3304 Scholars and Fellows had traveled to pursue higher studies in these countries under the Plan.

However, the Commonwealth Scholarship Commission does not accept applications directly from Indian citizens. The applications have to be routed through the government agencies, which play a role in prioritizing the fields of specialization for the Scholarships and Fellowships. The programme in India is managed jointly by Ministry of Human Resource Development (MHRD) of the Government of India and the University Grants Commission (UGC). The British Council office in Delhi and the Indian Council for Cultural Research (ICCR) also play a role. The MHRD and the UGC are the two primary nodal agencies for nominating Indian citizens to go abroad. While the UGC has been nominating candidates for the United Kingdom alone, the MHRD does it for all the Commonwealth countries including the UK. The British Council office in Delhi works as a facilitating agency for the Scholars/Fellows who are selected to go to UK for higher studies. It takes care of the financial needs of the Scholars, arranges their travel, organizes their reception in the host country and provides other welfare support services. The Indian Scholars visiting other countries of the Commonwealth receive similar kind of help from the concerned department/section from the office of the High Commission of the concerned country.

As a member of the Commonwealth, India has been an important host country for the Scholars/ Fellows from other Commonwealth countries and a good number of them have been to the Indian institutions of higher education. As per the *Directory* a total of 672 Scholars/Fellows came to India between 1960 and 2002 from different countries of the Commonwealth. The largest number of them came from Mauritius (109), followed by the United Kingdom (86) and Sri Lanka (66). The Indian Council of Cultural Relations (ICCR) acts as the facilitating agency for these Scholars/Fellows visiting India as the British Council works for Indian Scholars visiting United Kingdom (for a complete list of Scholars/Fellows who visited India see appendix 1).

3.2 The selection process

The process of selecting candidates begins with the Association of Commonwealth Universities (ACU) requesting the MHRD and the UGC to nominate candidates. After deciding on the prioritized areas of specialization the Indian nodal agencies put out an advertisement for applications in the national and regional newspapers, and more recently on their web pages. The newsletter of Association of Indian Universities also carries the notification. The UGC writes to the vice-chancellors of different universities in India during the months of July or August every year asking them to nominate lecturers and teachers for the following year. Separate advertisements are issued for CSFP awards to different countries of the Commonwealth. A large majority of the respondent awardees (nearly 60 percent) came to know of the CSFP through the newspaper advertisement, the remaining awardees heard of the programme from ‘other teachers’ in their institutions and their ‘peers’ (30 percent)

A large number of Indian citizens apply for these Scholarships/ Fellowships. For example, over the last eight or ten years, the MHRD has been receiving more than 3000 applications every year for anywhere between 55 to 60 nominations to the United Kingdom alone. Since applications for the Fellowships or Scholarships to the UGC have to be routed through the university where the applicants are employed the number of applications received at the UGC is much smaller. For 90 or 95 nominations, the UGC on an average gets around 350 to 400 applications³⁷.

In the second stage, the two agencies appoint a committee of experts from different disciplines from across the country. The concerned department first weeds out the applications that do not satisfy the qualifications set out in the advertisement. The expert committee then meets to screen the applications. They invariably arrive at a set of “objective criteria” like the academic record of the applicants. The candidates with the better academic record are then called for a personal interview with the selection committee. Since the number of applications received by the UGC is relatively small, the practice of screening was discontinued in 2004. On the other hand, the MHRD calls around 10 percent of all the applicants for the interview. All interviews are held in the national capital Delhi generally in the month of November or December for the awards beginning in September in the following year.

³⁷ N.B.: This information is based on our interviews with the officials of MHRD and the UGC.

The Selection Committee generally has more than one or two experts in each discipline and the total strength of the Committee could go up to 25 or 30. The experts are generally called from different parts of the country. However, given the distances, the MHRD has recently begun to give preference to experts from the city of Delhi and the towns located in the periphery. But the UGC continues to insist that the Selection Committee comprise representatives from all parts of India. In fact in 1998 the Chairman of the UGC expressed his 'dissatisfaction' with the panel on medicine that consisted entirely of experts from New Delhi and directed its office to make sure that in future 'they come from all corners of India' and that none from the current list be invited again. He also expressed his dissatisfaction with the list of the selected candidates for 'persons in the list were also predominantly from the north' of India³⁸. After conducting the interviews, the selection committees at the UGC and the MHRD short list candidates depending upon the number of nominations decided by the host counties/ACU.

3.3 Scholarships and fellowships

CSFP is comprised of a variety of different Scholarship and Fellowship schemes. Initially there were two categories of awards: the Commonwealth Academic Staff Award and the Commonwealth General Scholarships. The Commonwealth Academic Staff Awards was further divided into two categories: the Commonwealth Academic Staff Fellowships and the Commonwealth Academic Staff Scholarships. The Commonwealth Academic Staff Fellowships were again divided into two groups: the Commonwealth Medical Fellowships and the Commonwealth non-medical Fellowships. In 1995, the scheme of Commonwealth Academic Staff Fellowships was modified and a new Fellowship Plan was introduced which annulled the earlier distinction of medical and non-medical Fellowships. The medical Fellowships continued to be awarded separately and were routed through the Ministry of Health and Family Welfare, Government of India.

In the recent years, apart from the above mentioned schemes, the Commission has introduced Split-Site Doctoral Scholarships, which allows for a 12 month period of non-degree study in the United Kingdom on a split-site basis to aid the completion of a doctoral degree undertaken at a university by the awardees in their home countries. There are also Scholarships by Distance Learning and Professional Fellowships.

These Scholarship/Fellowships schemes are meant to serve different purposes. Some are for a long duration of three to five years to enable the Fellow to complete his/her doctoral degree. The short duration Scholarship are for post-doctoral research Scholarships extended over a year or for 'clinical training' in medicine or dentistry of a six month duration.

4 Who have been the Indian CSFP scholars/ fellows and where did they go?

4.1 The countries visited

Of the 3304 Indian awardees listed in the *Directory of Commonwealth Scholars and Fellows* during the period 1960-2002 a large proportion went to the United Kingdom (around 81 percent) followed by Canada (around 15 percent), Australia (around 2 percent) and New Zealand (around 1 percent) (see Table 4.1). A very small number of Indian Scholars chose other Third World countries which are members of the Commonwealth to pursue their studies or training. In other words, the movement of Scholars was clearly from the India to the universities and institutes of higher learning located in the first world and more specifically to the United Kingdom.

Table 4.1-1: Total number of Indian scholars/fellows who went abroad on CSFP (1959-2002)

Country Visited	Number of Scholars
Australia	64
Canada	506
Malaysia	3
Malta	3
New Zealand	41

³⁸ Handwritten noting on the file dated 22.12.98.

Nigeria	7
Sri Lanka	9
Trinidad and Tobago	2
United Kingdom	2667
Zimbabwe	1
Malawi	1
Total	3304

Source: *Directory of Commonwealth Scholars and Fellows 1959-2002*

This trend is also reflected in our fieldwork survey. Of the 106 respondent Scholars/ Fellows none reported to have gone to any Third World country and only 14 (13 percent) had gone to Canada. The rest either studied in

Table 4.2-1: Current age of the respondent awardees

Age	Number of scholars/ fellows	Percent
18- 30 years	2	1.9
31-40 years	13	12.3
41-50 years	44	41.5
51-60 years	29	27.4
61-70 years	16	15.1
71+ years	1	.9
No response	1	.9
Total	106	100.0

the United Kingdom (62 percent) or did not respond to the question.

4.2 Social profile of the respondent

Our respondents came from different age groups, representing a wide range of awardees and the experience of being aboard across generation (see table 4.2-1). Though proportionately the number of those who had been Commonwealth Fellows/Scholars during the last 15 years was much larger, we also had respondents who had been awarded the Fellowship/Scholarship before 1970. Our oldest respondent was awarded a Fellowship to go to England in 1961. As shown in table 4.2-2, five of our respondents were in this category. Another 18 had been awarded the Fellowship/Scholarship during the period 1971 -1981.

4.3 Professional background

A large majority of those who go on to pursue higher degrees in Indian universities are generally full time students. Interestingly, this does not seem to be the case with Indians awarded Commonwealth

Scholarships/ Fellowships. Nearly 85 percent of all our respondents were already employed full time at the time of selection. Another three percent had part time jobs. Only 12 percent reported to be full time students.

What do they do when they come back? A large majority of our respondents were currently employed with uni-

Table 4.2-2: The year of award of Commonwealth fellowship/scholarship to the respondent awardees

Decade	Number of fellows/ scholars	Percent
1960-1970	5	4.7
1971-1980	18	17.0
1981-1990	23	21.7
1991-2000	33	31.1
2001+	27	25.5
Total	106	100.0

versities/ colleges and other research organizations. As shown in the table 4 as many as 69 percent were employed either in universities or colleges and another around 13 percent were employed by research institutes, which together works out to be 82 percent. However, there are other issues related to their professional lives which have been discussed below.

Table 4.3-1: Current occupation of the respondent awardees

Employer	Number of fellows/scholars	Percent
University	67	63.2
College	6	5.7
Research institute	14	13.2
Bureaucrat/govt. service	1	.9
Private company	5	4.7
Independent consultancy	2	1.9
Medicine /public service	3	2.8
VC/ Director/ Head	2	1.9
Any other	6	5.7
Total	106	100.0

4.4 Religion and caste

India has been known for its cultural and social diversities. Apart from Hindus, who constitute nearly 82 percent of the total population, India has a substantial population of Muslims (around 13 percent), Christians (2 percent), Sikhs (1.5 percent) and Buddhists (around 1 percent). Apart from the religious diversities, India exhibits diversities of region and language. The traditional caste based divisions continue to divide Indians vertically and with the introduction of policies of affirmative action, the ex-untouchable communities now have stakes in being officially designated as “Scheduled Castes”.

In terms of religious background the awardees represented the overall diversity of the Indian population. While the respondent awardees came from virtually all the religious groups, the percentage representation of Muslims was far below their proportion in the Indian population (see table 4.4-1). This is also a reflection of the overall educational backwardness among the Indian Muslims as has revealed in a recent report prepared by a high level official committee³⁹.

Table 4.4-1: Religious background of the respondent awardees

Religion	Number of scholars/ fellows	Percent
Hindu	88	83.0
Muslim	2	1.9
Christian	3	2.8
Sikh	7	6.6
Buddhist	1	.9
Others/ no response	5	4.7
Total	106	100.0

In terms of caste also there was a clear tilt in favour of the upper and middle caste groups. Scheduled Caste and Schedule Tribe, the population for which Indian government has a quota of seats reserved were particularly underrepresented in our sample of the Commonwealth awardees. Though they together make-up for around 23 percent of the total Indian population, there were only two respondent from these social categories in a total of 106 respondent awardees. However, since we cannot claim our sample to be representative of the entire population of awardees, this may just be a reflection of their absence from our sample of respondents. But their underrepresentation is quite likely and could be seen as a reflection of the general lack of achievement and educational backwardness among them (as is the case with the Muslim population).

On the other end, those who identified themselves as upper caste was quite large (see Table 4.6). Though India no longer enumerates caste, except for those belonging to the Scheduled Castes, the proportion of upper castes in the total population of the country is no more than 10 to 15 percent of the population.

³⁹ See Prime Minister’s high level committee on *Socio-Economic Conditions of Muslims in India*, 2006.

Table 4.4-2: Caste background of the respondent awardees

Caste	Number of fellows/ scholars	Percent
Upper	54	50.9
Middle	26	24.5
Backward	15	14.2
Schedule caste	1	.9
Schedule tribe	1	.9
Not applicable	5	4.7
No response	4	3.8
Total	106	100.0

4.5 Region and language

Apart from religion and caste, India is characterized by diverse linguistic and regional communities. Our sample of awardees did not reveal the presence of any particular regional community among the respondents. Respondents from the Hindi speaking north Indian communities and the four Southern states were equally represented (30 each in 106), followed by Bengalis (17), Marathi/Gujaratis from Western India (12) and Punjabis (9). The rest were speakers of the 'other' languages.

4.6 Economic status

In terms of class background the respondent awardees came from what could be described as the mainstream of the Indian society. A large majority (84 percent) of them described their class background at the time of the selection for award as middle, upper middle or upper class. The proportion of those who identified the status of their families as upper or upper middle was not insignificant. In contrast less than 3 percent of the respondent described their family background as poor/working class (see Table 4.7).

Table 4.6-1: Economic status of the family when selected

Status	Number of Fellows/ Scholars	Percent
Upper	14	13.2
Upper-middle	25	23.6
Middle	50	47.2
Lower middle	12	11.3
Poor working class	3	2.8
No response	2	1.9
Total	106	100.0

4.7 Gender

The gender distribution of Scholars/ Fellows clearly reflects the general trend among Indian students going abroad for higher education. A large majority of the CSFP awardees (82 percent) were male. As mentioned above, nearly 80 percent of all the India students studying abroad are male.

More interestingly however, unlike those pursuing doctoral research and/or other degrees at national, state-level universities in India, the CSFP awardees were mostly married at the time of being selected for the Scholarship/Fellowship plan. However, there were interesting gender differences here. In a patriarchal society one would expect that the parents would generally disapprove of unmarried daughters studying abroad. The men were unlikely to face any such disapproval or resistance. Compared to men, women in India generally get married at a younger age. This however, is not the case with CSFP awardees. Less than half (See Table 4.8) the women awardees reported to have been already married at the time of award. In contrast the majority of the men awardees (nearly 85 percent) who responded to the question were married at the time of the award of the Fellowship/Scholarship.

Table 4.7-1: Marital status at the time of award of the respondent awardees

Sex	Unmarried	Married	No response	Total
Male	12	73	1	86
Female	11	9	0	20
Total	23	82	1	106

This could partly be explained with reference to the larger proportion of women who went abroad at a relatively younger age (see Table 4.7-2). Of the twenty women respondents nearly half (nine) were below the age of 30 when they were selected for the CSFP. In contrast less than one third (24 out of 86) of male respondents belonged to the below 30 years age category.

Table 4.7-2: Age when selected for CSFP by sex of the respondents

Age When Selected	Sex of the Respondents		Total
	Male	Female	
20-30 years	24	9	33
31-40 years	47	9	56
41-50 years	14	2	16
no response	1	0	1
Total	86	20	106

Table 4.7-3: Area of study by sex of the respondent awardees

Area of study	Male	Female	Total
Scientific research and training	38	6	44
Technology	9	1	10
Medicine	21	2	23
Social sciences	12	5	17
Humanities, languages, literature, arts	5	4	9
Vocational/professional	0	1	1
Any other	1	1	2
Total	86	20	106

Gender differences also appeared in the disciplinary orientation of the candidates. While less than half of the women went to do science, technology and medicine (9 out of 20), the proportion of men in this category was much larger (79 percent). Conversely, a much larger proportion of women Scholars/ Fellows studied social sciences and humanities than the men awardees (see Table 4-3).

5 Going Abroad

5.1 Experience of the foreign lands

To be selected for the Commonwealth Scholarship/ Fellowship is an important achievement for an Indian student, particularly for those coming from mofussil towns. The list of Fellows/ Scholars selected every year is published in the newspapers, which adds to the prestige of the awardees, their families and institutions. In the case of more than one-third of our respondent awardees the news of their selection for the Fellowship/Scholarship was reported by the local or national dailies. For a large number of them (59.4 percent) this was also their first visit abroad and for many it was the only time they traveled abroad. Nearly one-fourth of them never went abroad after they returned to India.

Table 5.1-1: Duration of stay abroad

Duration	Number of fellows/scholars	Percent
0-6 months	18	17

7-12 months	39	36.8
13-24 months	7	6.6
25-36 months	31	29.2
37-48 months	4	3.8
5 years +	7	6.6
Total	106	100

How long did they stay abroad? A majority of the Indian Scholars/Fellows stayed abroad for a year (see table 5.1-1) but the number of those who spent more than two years was also substantial (nearly 40 percent). The experience of having lived in another country, which in most cases was UK or Canada, was not simply an opportunity for professional training. Many of them went with their families and remember their stay abroad fondly as an important social and personal experience. When queried about their perceptions of having lived abroad, the largest number (see table 5.1-2) of them viewed it positively because it helped them change their personal attitudes.

Table 5.1-2: Perceptions on change in personal attitudes

Perceptions	Number of fellows/scholars	Percent
Very positive	52	49.1
Positive	27	25.5
Marginally positive	5	4.7
No impact	8	7.5
Negative	6	5.7
Cant say/ NA	7	6.6
No response	1	.9
Total	106	100

5.2 Perceptions of the selection process

The responses to the questionnaires and the interviews did not reveal any significant complaints about the selection process. As mentioned above, the government agencies managing the selection process have worked out quite an elaborate selection system. Though there are certain sections of the Indian population that are not sufficiently represented in the inventory of Scholars/Fellows, the overall profile of respondent awardees in India did seem quite diverse (see section 5 above). In fact a large number of the Scholars/ Fellows come from relatively lesser known universities and centres of higher education located in peripheral towns and hinterlands of India.

Around 6 percent of the respondent awardees had strong negative opinions about the selection process. A large majority of them felt that process of selection was 'very fair, open and completely unbiased' (56.6 percent) or 'reasonably fair and unbiased' (nearly 35 percent) (see table 5.2-1). These perceptions are obviously of those who were selected and may not reveal the real story.

Table 5.2-1: Perceptions of the respondent awardees on the selection process

Perception	Number of Fellows/ Scholars	Percent
Very fair, open and completely unbiased	60	56.6
Reasonably fair and unbiased	37	34.9
Open only to some privileged categories	4	3.8
Very exclusionary and completely biased	2	1.9
No opinion	3	2.8
Total	106	100

We also encountered evidence of the ability of routing agencies to resist the pulls and pressures of local political elites. The UGC and MHRD regularly receive formal letters from the Ministers in the Government of India typically worded as "I shall be grateful if you could kindly consider the application of Mr.for the award of Commonwealth Fellowship sympathetically".

There was a case when the UGC received four letters from different Ministers in the Government of India supporting a particular candidate. The letters received from the Ministers in the Government of India, cannot be

completely ignored by UGC officials and require a formal response. In most cases the letters of response from the UGC were ‘regret letters’ and were typically worded, “The application of was placed before the Expert committee constituted by the Commission. ... but due to limited number of placements available, the Expert committee could not recommend his/her name”. Nevertheless, in a few also cases the candidates recommended by the Ministers did get nominated. In such cases the concerned Minister was informed that “Dr. has been selected for the Commonwealth Fellowship Award for the year 1999 and his/her name has been recommended to ACU, London for final selection.”

Such letters are also received by the officials in MHRD managing the Commonwealth Fellowships/ Scholarships programme and they too have worked out a mechanism of dealing with these requests. The concerned official in MHRD informed us:

We do not respond to these letters until the selection committee has made its recommendations. We also do not show them to the members of the selection committee. However, if the concerned candidate has been recommended by the selection committee we inform the Minister and if he/she has not been recommended we still inform the Minister.

Apart from the formal letters of recommendation received from senior dignitaries in the Government of India, senior officials in the UGC and MHRD receive informal telephone calls in support of certain candidates and it would be difficult to make any inference about their impact.

6 CSFP and individual careers

6.1 Social and economic mobility

The most obvious motivation for applying for a Fellowship/Scholarship is of course to enhance one’s career options. A Ph.D. degree from a university abroad or the experience of post-doctoral research or training abroad is still valued in the professional life in Indian universities and other professional organizations. Having been abroad on a Fellowship/Scholarship also adds to the social capital of an academic. As one of our respondents put it, the stint abroad added to ‘one’s stature in the community, socially and professionally. Even when there were no immediate promotions, it was mentioned in all the official documents’.

Though perhaps the change in self-description of the respondents’ class position cannot be attributed solely to the fact that they were CSFP awardees, the respondent awardees did perceive having experienced significant upward class mobility over the years. As opposed to 36.8 percent of all the respondent awardees who described themselves as belonging to the ‘upper’ or ‘upper middle class’ at the time of selection as many as 66 percent did so when asked about their current class status. On the other hand, at the time of selection, nearly 14 percent of the respondent awardees saw themselves either as being ‘poor’ or coming from ‘lower middle class’ families. Only one respondent did so when asked about their current class status (see table 6.1-1).

Table 6.1-1: Class mobility of the respondent awardees

Status	At time of selection	Percent	Currently	Percent
Upper	14	13.2	18	17.0
Upper-middle	25	23.6	52	49.1
Middle	50	47.2	32	30.2
Lower middle	12	11.3	1	.9
Poor working class	3	2.8	0	0
No response	2	1.9	3	2.8
Total	106	100.0	106	100.0

6.2 Professional mobility

Perhaps more than mobility in social and economic class, the experience of going abroad on a Fellowship/Scholarship brings with it considerable professional mobility. Even though only 32 percent of our respondent awardees reported an increase in their salary as a result of the studies abroad, as many 74.6 percent indicated an

overall 'positive' or 'very positive' impact of the Fellowship/Scholarship on their professional career. This was reflected in increased 'invitations to national seminars' (40.5 percent); 'invitations to international seminars' (32.1 percent); 'membership of professional networks in India' (46.3 percent); membership of international professional networks (51.9 percent); 'membership of academic and learned societies' (22.7 percent); 'international research grants' (25.5 percent); 'invitations to referee works of other Scholars' (33.1 percent); and 'appointments on selection committees' (34.9 percent).

The experience abroad considerably helped them improve their 'professional skills in terms of teaching and research' (67.9 percent). A large proportion of them reported (67 percent) that the experience of having being on the Fellowship/ Scholarship did motivate them to actually use these 'new skills to alter the way they organized their research and teaching' (see table 6.2-1 on perceptions).

When asked to describe in detail 'what difference did CSFP make in the short, medium and long term to their career?' we received a wide range of responses. While some viewed it purely in terms of 'personal gains' such as promotions, others looked at the gains in professional terms. Though the promotions did not come automatically, the award did accelerate the process. As Madhu Raka⁴⁰ put it, "It positively influenced my promotion as reader and then as professor. I was awarded the INSA Young Scientist Award for the research work that I started Cambridge University during this Fellowship".

Nandini Ramanujan⁴¹ had even more positive things to say about the benefits of the award on her career.

The Commonwealth award completely changed the trajectory of my career. It opened an amazing array of opportunities and provided me the time and the space to explore these opportunities. The award in a sense had a multiplier effect on my career. After finishing my D.Phil at Oxford, I pursued a 10 year long career devoted to the reform and restructuring of higher education in the post communist Eastern Europe and the former Soviet Union; following which I worked as an independent consultant in the field of education and human rights education, which has brought me to my current position at McGill.

For Pooran Mal⁴² the award was an important vehicle which helped him immensely in the journey from a 'rural family' to an international research institute.

I come from a rural family and initially struggled to receive a good schooling. The Commonwealth Scholarship just changed my life. I received excellent education and training from University of Saskatchewan. I was full of enthusiasm and self-confidence when I returned to India and resumed my duties as Assistant Professor in an Agricultural University. I did well both in research and teaching and received promotions well in time. I became Professor in 2001. The biggest success in my professional career was an invitation in 2001 from ICRISAT (International Crops Research Institute for the Semi-Arid Tropics, Patancheru, Hyderabad, India) as Visiting Scientist (Chickpea Breeding) for one year. I never applied for it. It was in recognition of my research on chickpea. ICRISAT is one of the 15 centers of the CGIAR (Consultative Group on International Agricultural Research). It has a global mandate for chickpea research (as IIRI for rice and CYMMIT for wheat). As I was working on chickpea, it was my dream to work at ICRISAT. I gladly accepted the offer and joined here as a Visiting Scientist. After seeing my work, ICRISAT offered me a regular position. This is how I ended up at ICRISAT. I would give full credit for this achievement to Commonwealth Scholarship.

Even when some of the respondents did not see any immediate advantage in terms of career mobility, they viewed the award as having benefited them immensely in the long run:

There was no scheme of promotions in our universities then (1972). I was appointed Reader, through an open selection, fourteen years after my Ph.D. (from the University of Warwick). This was partly because there were very few positions and partly because there were a large number of candidates with similar

⁴⁰ Chairperson, Dept. of Mathematics, Punjab University, India

⁴¹ Interim President, Canadian Human Rights Foundation, Canada

⁴² Senior Scientist, International Crops Research Institute for the Semi-Arid Tropics, Patancheru, Hyderabad, India

Table 6.2-1: Responses on perceptions (All figures in bracket show the percentage)

Questions	1* F (%)	2* F (%)	3* F (%)	4* F (%)	5* F (%)	6* F (%)	7* F (%)	8* F (%)	9* F (%)	10* F (%)	11* F (%)	12* F (%)
Very positive	45 (42.5)	17 (16.0)	17 (16.0)	16 (15.1)	22 (20.8)	19 (17.9)	13 (12.3)	44 (41.5)	13 (12.3)	13 (12.3)	14 (13.2)	42 (39.6)
Positive	34 (32.1)	17 (16.0)	26 (24.5)	18 (17.0)	27 (25.5)	36 (34.0)	11 (10.4)	28 (26.4)	14 (13.2)	22 (20.8)	23 (21.7)	29 (27.4)
Marginally positive	4 (3.8)	17 (16.0)	21 (9.8)	17 (16.0)	21 (19.8)	17 (16.0)	26 (24.5)	10 (9.4)	21 (19.8)	23 (21.7)	20 (18.9)	11 (10.4)
No impact	8 (7.5)	38 (35.8)	27 (25.5)	42 (39.6)	22 (20.8)	18 (17.0)	35 (33.0)	7 (6.6)	32 (30.2)	29 (27.4)	29 (27.4)	10 (9.4)
Negative	5 (4.7)	5 (4.7)	3 (2.8)	3 (2.8)	2 (1.9)	8 (7.5)	6 (5.7)	4 (3.8)	4 (3.8)	3 (2.8)	0 (0)	4 (3.8)
Can't say/ NA	8 (7.5)	9 (8.5)	9 (8.5)	8 (7.5)	10 (9.4)	6 (5.7)	13 (12.3)	12 (11.3)	20 (18.9)	13 (12.3)	18 (17.0)	9 (8.5)
No Response	2 (1.9)	3 (2.8)	3 (2.8)	2 (1.9)	2 (1.9)	2 (1.9)	2 (1.9)	2 (1.9)	2 (1.9)	3 (2.8)	2 (1.9)	1 (0.9)
Total	106 (100)											

Notes: 1. Impact on professional career. 2. Impact on promotions/ salary. 3. Impact on getting invitations for national seminars. 4. Impact on getting invitations for international seminars. 5. Impact on getting into professional networks in India. 6. Impact on getting into professional networks inter-nationally. 7. Impact on getting membership of academics and learned societies. 8. Impact on research/ teaching/ professional skills. 9. Impact on getting inter-national research grants. 10. Impact on getting invitation to referee works of other Scholars. 11. Impact on getting appointed on selection committees. 12. Did it motivate you to alter the way you organized research/ teachings/ Business.

qualifications. I must add however, that the situation was probably different in many other subjects. Also, even in the short term, probably there could have been a difference if I had moved to some other university

Some awardees faced hostility on their return to the institute from where they had gone on paid leave to pursue doctoral research. Their newly acquired additional qualification generated a sense of insecurity among colleagues resulting in unnecessary tensions at the workplace. But even in these cases, the respondents felt that eventually they turned up winners. As Dr Asad Nizam⁴³ puts it:

In the short run the impact may have been negative because I suspect that those colleagues who may have considered the foreign degree to be a threat to them colluded with those in administration and were responsible for acts such as the increments being denied for PhD. for a long time, bungling with seniority of the cadre and the accruing benefits. After some struggle many of these issues have been settled. At present (medium term) there has been neither significant gain nor loss, but in the long run I am optimistic that the benefits of PhD. will eventually accrue as there are few people in the field with equivalent qualification.

Dr. Asad Nizam was not the only one who faced hostility on returning to the institution from where he had proceeded for doctoral studies. Several of our respondents were frustrated because they could not really use the skills they had acquired during their training abroad in teaching or research. This generally happened in cases where the respondents worked in smaller universities or research institutes. Some of them contemplated changing jobs and some actually did. But a large majority of our respondents were satisfied with their current locations and their overall achievements. We shall come back to this part of the discussion again.

6.3 New work culture, confidence and enhanced self-worth

⁴³ Presently working as Professor, Dept. of Mass Communication and Journalism, Doon University, Dehradun, Uttarakhand, earlier he was at IGNOU.

Most Fellows and Scholars in the fields of science, technology and medicine remarked about the work culture in the laboratories of Britain and Canada. Dr. Sisilamma George's observations on her work at Edinburgh are in the spirit of the others interviewed⁴⁴. Unlike the handholding of doctoral students in most Indian universities and even some research institutes, Sisilamma found that once she joined the doctoral programme at the Rosalyn Institute, Edinburgh, the students were all on their own. The laboratory assistants were around to familiarize them with the instrumentation, but once that was done she had to navigate her way through technical chores and her research with little further guidance. This she found initially rather strange, but over a period of a year she had overcome this sense of being left stranded, and thereby discovered her own problem-solving and troubleshooting abilities. The other noticeable feature she recollects from her stay was the total absence of any scarcity of technical instrumentation, laboratory chemicals and reagents as different from the severe technological and resource constraints that haunt the pursuit of scientific investigations in provincial colleges and towns in India. This meant that experiments could be replicated a number of times at the laboratory at Edinburgh. This was a perpetual constraint of working in a resource starved condition at their laboratories in India.

Similarly, Sreekumar was awarded a Commonwealth Fellowship to pursue his doctoral research at the same institute as Sisilamma and recollected that Edinburgh widened his intellectual horizons in many ways⁴⁵. In the first instance he was exposed to new trends in biological science. The field of endocrinology was underdeveloped at Thrissur and he was able to overcome this deficiency during his tenure at Edinburgh. Secondly as observed by Sisilamma he realized how large the technological gap was between their university and Edinburgh, and he picked up entirely new techniques while working on his doctoral dissertation. Sudhakara from the College of forestry near Thrissur did a post-doc stint at the University of Aberdeen and now feels that the time spent there certainly enriched his repertoire of technical skills but could not be transformed on his return home into another institutional context⁴⁶.

S. Shivashankaran is a pediatric cardiologist and spent a year as a Commonwealth Fellow at Guy's Hospital, London⁴⁷. Shivashankaran was in the first instance impressed by the focused work culture, the ability to work in teams, the approach to patients and the collegiality that prevailed among the doctors. Further, the time spent there enhanced his self-worth and confidence, all of which came in good stead in establishing a centre within the department of cardiology. His failing if any he feels has been his inability to set in place teamwork, since every consultant in India functioned autonomously; team work was hard to come by. Off the practices he appears to have been impressed by is the approach to the cardiac problems of children: the Indian style he feels was negative – “the child cannot be saved”, and even though in the end the child was saved, at the very outset the approach generated negative feelings. The British tradition on the other hand was that the child had to be saved.

As mentioned above, many of the awardees felt that the most useful aspect of their having been abroad was on their ‘personal attitudes’. Exposure to a different culture and a different way of doing things helped them re-examine their attitudes and values. It also helped them learn different ways of relating and organizing work. Shivashankaran clarified that:

My approach to problems changed a lot. In the short term, my specific output as a trained person in pediatric cardiology gave me a special identity. In the medium term, contrary to my training in India, where I learned to find fault with all my colleagues, system and juniors, I learned the art of identifying the problem and solving it in a manner suited to the place and to encourage people to get the best out of them. In the long term I could refine myself into a good team leader and an academician, who has state of the art knowledge in his field of specialization.

Harikrishnan S. is also a cardiologist who went on a short duration Faculty Fellowship in 2005-2006 – about six months⁴⁸. The selection process was coordinated by the UGC. He went for training to the Leeds General Infirmary for upgrading his skills in Coronary Intervention procedures. During his stay of 6 months in Leeds he performed about 300 procedures, which in medical terms was a “tremendous experience”. On his return he was then allowed to perform these procedures on his own, without any supervision. The experience in Leeds helped him acquire greater self-confidence and contributed largely to his self-worth. Two memorable experiences of his professional training at Leeds included the observation that the hospital was better staffed and there was never any shortage of instrumentation when compared to the circumstances back home. Secondly, the work culture was highly focused and the division of labour very strictly defined as a consequence of greater specialization. In In-

⁴⁴ Associate Professor and Head, Department of Biochemistry, College of Veterinary and Animal Sciences, Thrissur in Kerala

⁴⁵ Head of Physiology, Department of Biochemistry, College of Veterinary and Animal Sciences, Thrissur in Kerala

⁴⁶ Associate Professor, College of Forestry, Vellanikara, Kerala.

⁴⁷ Head of Paediatric Cardiology, Sree Chitra Tirunal Institute for Medical Sciences, Trivandrum, Kerala.

⁴⁸ Cardiologist, Sree Chitra Tirunal Institute for Medical Sciences, Trivandrum, Kerala.

dia on the other hand resources were used more carefully, since the burden of a more generous use of medical resources, in the absence of a scheme like the NHS, was on the patient. Like Shivashankaran before him, Harikrishnan was impressed by the amiable atmosphere among the consultants working at the hospital. His future plans included bringing over some of the consultants from there into the country.

Similarly, another doctor, Sanjay Behari⁴⁹ reiterated the point made above:

Since this Fellowship enabled me to work in a new country, I gained in many aspects and resolved many of my pre-conceived and false perceptions (that inevitably form with a superficial knowledge of another country). I learnt the importance of establishing protocols which need to be systematized for an efficient working of my own department. I learnt what it means to work in a team where people with different backgrounds work towards a common goal to achieve amazing results. I learnt to adjust to a new set of rules and mannerisms which I hope has made me more open and perceptive towards different ideas and opinions. Finally, I understood that working and staying in different countries is not difficult since people everywhere have the same aspirations and apprehensions.

Many saw the confidence they acquired as beneficiaries of the award encourage them to take up challenging projects, international assignments and consultancies, which eventually helped them in their careers. B. K. Sharma⁵⁰ pointed out that:

It encouraged me to take up more fruitful research assignments and Fellowships abroad especially in Britain. The Commonwealth Fellowship infused a certain confidence in me which will definitely have a long term effect on my career and future scientific/academic endeavors.

Similarly R. Saraswathi⁵¹ attributes her success as a researcher and teacher to the CSFP award.

My visit to UK on a Commonwealth Fellowship has increased my confidence to do research in new areas. The techniques that I had learnt during my stay in UK have been helpful in guiding my students. The literature collected during the period had been helpful in developing new projects and acquiring grants after coming to India.

6.4 Teaching and research skills

Many of our respondents saw the benefits of CSFP award in terms of new teaching and research skills they acquired during their stay in Britain or Canada. These skills made them better teachers and researchers. They began to be more productive as researchers and attracted better students for research supervision. As Kiran Pandya⁵² puts it

Even though it (the CSFP Fellowship) did not make much of a difference directly to my career, indirectly it has contributed a lot. I get better academic assignments. Brilliant students prefer working with me for their doctoral studies.

Similarly, A. K. Bannerjee⁵³ trained in neuropathology during his stay in England and on his return provided a new set of 'services to the hospital, teach postgraduate students, train specialists and carry out research on clinical material'.

The responses from the social science awardees were also of a similar nature. Thus a leading historian such as Chitabrata Palit, a professor at Calcutta University, an early recipient of the Commonwealth fellowship, as well as Raji Verma, another former Commonwealth Fellow from the department of English, Delhi University felt that the fellowship, may not have played such an important role in adding to their stature, but what it certainly did was to provide a wide theoretical and conceptual exposure to research and research practices. This exposure enabled them to fine tune their research skills, and as in the case of the scientists, socialized them into specific ways of addressing research problems.

⁴⁹ Assistant Prof. Sanjay Gandhi Post Graduate Institute of Medical Sciences, Lucknow, India.

⁵⁰ Royal Society Incoming Fellow, the Wolfson Centre for Stem Cells, Tissue Engineering and Modelling (STEM), University of Nottingham

⁵¹ Reader and Head, Dept. of Material Science, Madurai-Kamraj University, Tamil Nadu, India

⁵² Reader, Economics, South Gujarat University, India

⁵³ Professor, Post Graduate Institute of Medical Education and Research, Chandigarh, India

6.5 Individual mobility and institutional gains

The majority of the awardees work with research institutions, funded by the state. Consequently, a better doctor, teacher or better researcher in a research institution was a major asset. Some Scholars and Fellows established new departments or institutions and attributed their motivation and confidence as stemming from their experience abroad. Eadala Saibaba Reddy⁵⁴ set-up a new centre for research in geo-environmental engineering at his alma mater and during his tenure as a CSFP awardee signed a memorandum of understanding between the his university and a foreign university. A. V. Lakshmanan⁵⁵ was able to 'set-up a doctoral programme in Medical Physics in 1975, which at that time was the first of its kind in India'.

From 1981 I also initiated a M.Sc programme in the subject. This programme trains 15 to 20 graduates every year who are readily absorbed in the various cancer research centers in India. My department came to be known and recognized widely in India attracting many students and trainees for the Ph.D. programme. The institution benefited greatly from my training in the U.K.

Partha Basu⁵⁶ attributes the success of a new programme initiated by government of India directly to his training abroad as a Commonwealth Scholar:

The major focus of my CSFP training was to learn about the community based cervical screening program. After I came back from UK I was given the charge of running the community based cancer control programs of our institute. Through this program supported by Government of India I could organize cervical and breast cancer screening for thousands of women in rural areas of our state. As recognition of my work I have been made member of the National Task Force on Planning and Implementation of Cancer Control Program, Government of India and many other national and international bodies dealing with the kind of work I do. The new cervical screening test I worked to develop and validate is now being used widely in India and many other low-resource countries. That is a big personal satisfaction for me. I initiated the School for Cervical Cancer Prevention with assistance from my thesis supervisor and WHO that is recognized as a training center for doctors from all over India and neighbouring countries.

Anil V. Kulkarni⁵⁷ said that on his return from Canada after studying glaciology as a Commonwealth Fellow he realized that he 'was one of the few academically qualified glaciologists in the country and this subject had great importance for Indian society. Over a period of last 20 years, I could make major contributions to developing our understanding of Himalayan glaciers, wrote a large number of scientific papers in international and national journals and trained a team of scientist to study Himalayan glaciers.... I think, without the Commonwealth Fellowship and an academic understanding developed at a Canadian University, it would have been very difficult to develop glaciology program'.

There have been cases where the Scholars were able to mobilize their overseas networks in developing some new institutional facility in India. C. V. Kantharia⁵⁸, for example told us that with the help of doctors he worked with during his stint as a CSFP Scholar they set-up 'a specialized department of GI Surgery in their hospital in India, which is the first of its kind in western Maharashtra'. His overseas colleagues are also helping establish Cadaveric Liver Transplant programmes at his Hospital. In another case, the former supervisor of a doctor was going to visit India 'to conduct a workshop in Interventional Cardiology'. Harikrishnan also consults his colleagues at the Leeds General Infirmary when he has a 'difficult clinical case'.

Several others who had gone to do Ph.D. or post-doctoral research continue to collaborate with their thesis supervisor. In some cases the Indian Scholars/Fellows also go back to complete the work they started during their first visit. Some of these collaborations continue for a long time and in some cases the overseas collaborators also visit India and develop their own networks. P. K. Mohapatra not only invited his supervisor Professor Richard Swinburne to India but also arranged funding for his visit to several universities in India. His ability to invite an important philosopher gave 'a major boost to my academic prominence among peers in India'. Some other overseas Scholars also use their contacts with CSFP Scholars/Fellows to visit India and do work here.

Nevertheless, the mechanisms of problem choice and the bench-marking of research in the social sciences, as any textbook on the philosophy of social sciences will suggest, is radically different from that in the sciences. As a result it is difficult to gauge what institutional gains have accrued by the presence of Commonwealth fellows at

⁵⁴ Prof. Dept. of Geo-Environmental Engineering, JLN Technological University, Hyderabad, Andhra Pradesh, India

⁵⁵ Director, Cancer Institute

⁵⁶ Head, Dept. of gynaecological oncology, National Cancer Institute, Kolkata

⁵⁷ Scientist, ISRO, Ahmedabad, Gujarat.

⁵⁸ Assistant Prof, Gastroenterology, KEM Hospital and College, Mumbai.

the universities and research institutes. In the first instance several of the social scientists pointed out that in the social sciences, the Commonwealth fellowship did not enjoy the prestige of the Rhodes Scholarship or the In-laks. But it provided an opportunity to students who had no access to these fellowships to proceed to England and acquire an education there. It was more important therefore to think in terms of the skills and expertise acquired than the prestige associated with the Fellowship.

Secondly, in England, some scholars from the humanities felt that they were not allowed to pursue research on problems of their choice. On the other hand, they were oriented towards research concerns that were central to communities of social scientists in England. While they certainly benefited from this re-orientation since they were introduced to core research concerns in the West, other kinds of research concerns were ignored. P.K. Jain, a professor at the School of International Studies, Jawaharlal Nehru University, obtained his Ph.D. as a Commonwealth fellow from a university in Canada. Jain points out that when he arrived in Canada diaspora studies was acquiring importance and so he was asked to study the Indian diaspora communities in Africa and elsewhere, a field in which he became an expert. On the downside, however, commonwealth fellows who desired to pursue studies on Shakespeare or Wordsworth in England were dissuaded from doing so and encouraged on the other hand to study Indian literature in English or Indian literature in any of the Indian languages. This policy, whether deliberated upon or not, certainly promoted the development of the discipline of Indian literature in English in departments of literature of English universities, it did little to contribute to the development of English or Anglo-American literature in India.

6.6 Widening of cultural horizons

An important dimension of the Commonwealth Fellows' experience had to do with a widening of their experience of the academic world as well as an overall broadening of their cultural horizons. This encounter permeated several levels of experience and the nature of the response revealed minor differences across the disciplinary training of the Fellows. The most acute cultural response came from the Fellows with a background in the sciences and engineering, while those from a social science background were the least surprising. The pedagogy of science and engineering education in India is excessively technocratic and focused with little time or effort being dedicated towards completing a larger portrait of a university educated graduate student. In fact, most engineering colleges are spatially divorced from the university even though the degree is awarded by the universities. On the contrary ever since independence the culture of the social sciences has been far more independent, critical and radical.

Niranjana⁵⁹ and Roy Joseph⁶⁰ work for the prestigious Sree Chitra Tirunal Institute for Medical Science and Technology, Trivandrum. Both were awarded the Commonwealth Fellowships to pursue their doctoral studies in England. The institute they were working in is a leading research institute in the country and after their graduate education they enrolled as technical staff at the institute involved in technology and product development. Recounting their experience as doctoral students in England both pointed out that they worked in an institute dedicated to the development of technology and technology products, and registering patents. The experience of research at a university, as contrasted with the highly targeted and mission oriented research environment of a research institute, seemed to have widened their perspective of doing science, defining research problems, and placing them within a wider set of questions. This widening of perspective led them to change their own subsequent approaches and work. They began to rework research concerns into their technological development projects. In that sense the culture of doing science in a university centre drew them out of the narrow focus of an institute.

⁵⁹ Scientist, Bio-medical Engineering Group, Sree Chitra Tirunal Institute for Medical Sciences, Trivandrum, Kerala.

⁶⁰ Scientist, Polymeric Materials Group, Sree Chitra Tirunal Institute for Medical Sciences, Trivandrum, Kerala.

7 CSFP and institutions of higher education in India

7.1 Introduction

This section draws upon interviews conducted among some of the CSFP Scholars, and teases out their impressions of how they benefited from the CSFP, and how the latter contributed to the evolution of higher education in India. For analytical purposes we distinguish the responses of Scholars located at the state level universities and colleges from those positioned at the premier research institutes and leading universities with active research departments. This follows in a manner of speaking from the preceding discussion on the structure and differentiation of higher education in India today. This differentiation in the structure is also one of a differential distribution of resources – financial, material and human, and marked by a differentiation of functions. The latter differentiation is not in any way sanctioned by the charter of the state level universities, but is a consequence of the structural evolution of the university in post-colonial India.

The underlying differentiation is further premised on the idea that researchers and faculty employed at state level and smaller universities tend to migrate towards central, national universities and premier research institutes. Secondly, while the world of higher education in India is quite strictly defined by “the two cultures” divide the pattern and consequences of the above mentioned structural differentiation persist across the two cultures divide. Finally, the segmented nature of higher education in India is such that CSFP Scholars returning to the premier institutes and universities are able to translate their training and research at foreign universities into worthwhile research programmes more easily than their counterparts at the lesser known universities dotting the country.

7.2 Research networks and clusters of research institutes in India and the United Kingdom

Over the years the CSFP has acquired visibility within certain institutions of higher learning and professions. In particular, it appears that the agricultural and veterinary sciences and medicine have benefited most from the programme. Thus it could be suggested that within these mentioned institutions of higher learning the first awardees set the trend for subsequent generations students and candidates. Thus in institutions like Sree Chitra Tirunal in Kerala, the State Agricultural Universities in Thrissur and the University of Agricultural Sciences, Bangalore, Jadhavpur University, Calcutta, Punjab Agriculture University, Ludhiana potential candidates had learned about the CSFP through their teachers who had already availed of the Fellowship or through their seniors who had been awarded the Fellowship or the Scholarship. This suggests that networks of CSFP Fellows had informally crystallized in several cities. The programme in the mentioned professions and disciplines became a vehicle for furthering their professional and/or academic careers.

More than 70 percent of the Indian students pursuing their post-graduate education abroad are in the United States. However, there is a difference between the reasons for this clustering in the agricultural and medical sciences. From the large number of agricultural colleges in the country the largest migration for post-graduate studies takes place to the United States. The students who stay behind pursue their doctoral programmes within a centralized IARI scheme. The students who then apply for Scholarships do so in sub-areas/specialties they cannot pursue at their own universities. In medicine on the contrary the prerequisite for study in England or the United States is a tightly controlled entrance examination. For those who cannot afford pursuing this path the CSFP offers another path to acquiring a higher education and advancing their credentials that have salience within their respective professional circles.

Thus while Niranjana came to know of the Fellowship from a newspaper advertisement, Roy Joseph from the same institute followed in Niranjana’s footsteps. However, in obtaining the Fellowship Niranjana feels he benefited from the institute’s reputation, its specialization and the contacts with Scholars abroad were rendered possible through the institute’s activities. Niranjana met his thesis supervisor at a conference. Similarly, K. Mohandas⁶¹ of the same institute too came to know of the programme from his wife who is a medical professional. K.P. Sreekumar came to know about the Fellowship from a teacher at the Veterinary college. It appears that a number of scientists from the agricultural university at Vellanikara, Thrissur have been recipients of the Fellowship. Sreekumar counted at least four other names of Fellows from the College that did not figure in our list. Further,

⁶¹ Director, Sree Chitra Tirunal Institute for Medical Sciences, Trivandrum, Kerala.

the fact that their application was turned down the first time did not deter these candidates from applying again and they did succeed in about two trials.

There appeared to be a feeling that the chances of making the Fellowship were higher if one applied as a teacher. Shivashankaran came from a lower middle class family. He was inspired by his college teachers, some of whom were Commonwealth Fellows, at the Trivandrum Medical College. In fact, they planted the idea in him of acquiring a Commonwealth Scholarship one day. He joined his present employment in 1994 and obtained the Fellowship for the year 2002-2003. He visited the Guy's Hospital – the world's oldest teaching hospital. He worked with Dr. Qureshi there, whom he considers his mentor.

Another agricultural scientist Dr. P. Narayanaswami⁶² went to the, Imperial College of Science and Technology between 1991 and 1994. He came to know of the Fellowship after a colleague Ashok was awarded the Fellowship. However, he was not given a choice between Canada and the UK. Normally, students from his university preferred to go the United States, or Canada since its research culture was seen to be quite similar to that of the United States. Narayanaswami was not given a choice but, was asked if he wanted to go the UK; and 2 supervisors in the UK accepted his proposal. Narayanaswami's colleague Ashok⁶³, a biochemist at the same university, claims to have chosen to go to Alberta, Canada randomly; but there was a feeling within the community that the university system in Canada was quite similar to that in the United States, and their courses were structured on lines similar to that in the United States. Besides, two of his colleagues went on a Commonwealth Fellowship to Canada in the previous year.

Pandurangappa⁶⁴ did not belong to either of these huge academic networks and came to know of the Commonwealth Fellowship from the *Employment News*, fortnightly carrying news about jobs, academic positions news and Fellowships. Pandurangappa had done his Ph.D from IIT-Madras between 1992 and 1996 in environmental chemistry and then went on a Commonwealth Fellowship during the period 2001-2002. He was aware of the work of the group that he subsequently worked with at Oxford, since they were working on the same problem and they were glad to have him.

In the social sciences too, similar trends were observed. Chitabrata Palit was a student in Calcutta University of a professor of history who knew the historian Eric Stokes. Further, there were other scholars who had studied in England either as Commonwealth fellows or had been there on some other fellowships. Consequently, he was familiar with a network of researchers even before he left for England, and even may have known who would possibly supervise his doctoral thesis. His younger colleague Sudeshna Banerjee who too went to England to pursue her doctoral studies as a Commonwealth Fellow did so because she knew about the network of historians through her senior colleagues in the Department like Chitabrata Palit. However, several social scientists interviewed came to know of the fellowship through the advertisement in the newspaper, and even though they were aware of the researches of communities located in English universities they were not acquainted with them through academic networks nor were they introduced to them through their mentors in India.

7.3 The impact of the CSFP on state colleges and universities and state agricultural universities

We shall discuss the cases of the interviews of the CSFP Fellows currently located at the State Agricultural Universities to explore the impact of the Programme on higher education. We start with the discussion with Sisilamma George from the College of Veterinary and Animal Sciences, Thrissur. She was a former student of the college and was employed at the College in the early 1980s. She candidly pointed out that jobs at the college were easily available in the 1980s in contrast to the current situation where there has not been any recruitment since the last seven years. The Commonwealth Fellowship was awarded to her for the period 1993 and 1996. During this period she worked towards a doctoral degree in biochemistry at the Rosllyn Institute and the degree was awarded by the University of Edinburgh. Her doctoral work was in veterinary biochemistry and involved techniques of gene mapping and electrophoresis. While she was aware of the existence of these techniques in India, she had never employed them. On her return she estimated that there was a 10-15 year technological gap between the state agricultural universities in India and the universities in the developing countries. This she qualified was probably not the case with the institutes of national importance: meaning the research institutes and possibly the central and deemed universities. In other words, she was suggesting that the technological gap and

⁶² Department of Horticulture, GKVK, University of Agricultural Sciences, Bangalore.

⁶³ Department of Biochemistry, GKVK, University of Agricultural Sciences, Bangalore.

⁶⁴ Department of Chemistry, Bangalore University, Bangalore.

not the “knowledge gap” between the university where she was teaching and that of Edinburgh where she pursued her Ph.D was significant.

When queried about what transpired on her return to India, the story of the decline of agricultural research and teaching in India particularly at the state universities became evident. In the first instance there was no enhancement in her status amongst her colleagues having obtained the imprimatur of a Commonwealth Fellowship and doctoral degree from Edinburgh. Since there was a shortage of teaching staff her time was taken up by undergraduate and graduate teaching and supervision of student projects and dissertations. There was never any opportunity to develop her research capabilities or capitalize on the networks she had become part of in Edinburgh. It appears that even within India she was not part of the network of researchers in her field of specialization. While in Edinburgh she felt that she was at the frontier of research, the freedom to develop courses back at her own college were lacking – since curriculum and syllabus development were centralized and undertaken by committees appointed by the university for several colleges distributed around the state. Over the past two years she has nevertheless been able to develop a course called Masters in Veterinary and Animal Sciences and hopes that she will be able to obtain approval for a doctoral programme once the first batches pass out. Overall the picture at the college was one of a totally demoralized academic community. There was even a feeling that the Commonwealth programme had more or less forgotten about them after their return. (We heard similar stories from Scholars and Fellows working in relatively smaller towns in the universities located in the periphery of Indian academy).

Similarly, her colleague K.P. Sreekumar, heads the department of Physiology. He went to the same institute as Sisilamma a year after she left (1994-97). Like Sisilamma he returned to a demoralized university climate. Neither of them went abroad again after their doctoral research and while Sreekumar made efforts to develop a collaborative research programme with his supervisor it appears that nothing concrete materialized. However, he is now part of a network of researchers in India, something that Sisilamma was unable to manage. Both see themselves as faculties of departments providing training in the “pure sciences”. The university now insists that they undertake revenue generating research projects and activities, which they are not trained to pursue. Nevertheless, the attempt to reorient the focus of investigation and teaching is reflected in the dissertations that the students submit for their master’s level thesis. Those students who have an orientation for research do not stay on at the College but proceed elsewhere, usually the United States, for further studies. The research publications that Sreekumar has managed despite his heavy teaching schedule have appeared in Indian Journals of Veterinary and Animal Sciences. He presently has little communication with the international community in his field of specialization. The system it appears is hardly conducive to change either at the level of the curriculum or in terms of research initiative.

Sudhakara is an Associate Professor at the College of Forestry, Vellanikkara. He spent the period 1989-1990 as a post-doc at the University of Aberdeen, and in particular he spent time at the department of forestry, where he worked with a group who were doing some interesting work on tree nutrition and simulation studies on acid rain. Sudhakara completed his doctoral studies at India’s prestigious IARI, New Delhi. Recollecting the time he spent at Aberdeen, he was impressed with the focused nature of research activity at the department. He even lamented that had he remained in Aberdeen he would have published many more papers. In short all three Fellows cherished the importance of research – as activity of the academic world, research and publication had become a much coveted but unrequited part of their horizon within the university context. They are with teaching - the teaching load could be as high as sixteen hours a week. Secondly, they were frustrated with their inability to alter the course structure. And finally, there appears to have been no institutional or academic recognition of their abilities. What then could the impact of the CSFP have been under such circumstances? The related question is how under the circumstances do so many people from the SAUs (state agricultural universities) get the Fellowship every year? It is evident that while the quality of teaching is moderate, the standards are high. Further, the CSFP offers students and faculty of the university the opportunity to pursue doctoral degrees in areas where the university has none to offer. The Fellows return with doctorates to a university environment that is inhospitable to their newly acquired skills, which is not what happens at the research institutes. Consequently, Sudhakara has been unable to develop research collaborations with teams at the frontier of his discipline, even though he does manage to do some research. However, Sreekumar and Sudhakara are trying to introduce some of the democratic environment in teacher-student relations that they imbibed from their stay in Scotland But beyond that it is difficult to measure the impact of their stay in the UK on higher education in India.

On the other hand Ashok. T. H. is at the Department of Biochemistry, College of Agricultural, G.K.V.K., in metropolitan Bangalore. He went to Alberta, Canada to do his Ph. D and worked with another researcher before changing his supervisor with whom he completed his doctoral thesis. He is one of the first Fellows to point out to the hardships caused by the mismatch between the interests of the students and that of the supervisor. Compared to his unit back in India, he found that the facilities at Alberta were much better, the laboratories were bet-

ter stocked, the researchers and research programmes were more intensely focused, the research culture emphasised timeliness and punctuality, and by and large researchers had better communication skills, which were considered as important as the research skills within the community. In terms of research themes and priorities, he found that importance was accorded to fundamentals and fundamental science as well, which was not the case at GKVK, where little or no emphasis in research programmes was accorded to basic sciences in agricultural science research. On returning to India he continued with a teaching and research job, involving less than 10 hours of teaching a week, and guiding the research of his students, at the master's and doctoral levels. As he had suggested earlier, the focus of research is not on the fundamental aspects of the science of agriculture; but Ashok does have a number of research projects funded by the Department of Science and Technology, New Delhi. His group publishes their work in Indian journals, since students are in a hurry to publish to add brownie points to their resumé's.

P. Narayanaswami at the Department of Horticulture, Bangalore did not have any familiarity with any techniques of tissue culture before he proceeded to Imperial College, London. Like other Fellows who did experimental work he reported that he was left to his own resources when he joined a laboratory in London - a practice that he benefited from in the long run, since he was forced to find solutions by himself. However, in England most of his research was done under green house conditions where the controls are clearly defined; while in India they worked in real life conditions which the researcher found advantageous. Back home in India he has been pursuing an intense research programme and not so intense teaching career. At the moment he is supervising 3 doctoral students; and has completed many projects for the Department of Science and Technology and the Council of Scientific and Industrial Research. His teaching responsibilities extend to about 12 hours a week; which leaves him time for research. As a researcher he publishes in Indian and "internationally refereed journals"; and is also called to referee papers for national level journals, just as is done with Ashok. Before his experience abroad, he never tried to publish any of his research results in an international journal. In fact, he introduced tissue culture techniques in horticulture at his university. After returning he has introduced changes in the curriculum; this is routinely done in the university every 3-4 years. Off late the areas earmarked for Fellowships have changed and over the last three years no more Fellowships have been awarded to the area of horticulture.

Pandurangappa is with the Department of Chemistry, Bangalore University. He was awarded a Commonwealth Fellowship to proceed on a post-doctoral stint at Oxford University to work with Reinhard Compton, a noted physical and theoretical chemist. While at Oxford he was impressed with the quality of facilities, manner of handling courses, materials, instruments and the focused approach to research. Since the group he was attached to was large his colleagues helped him to resolve all the early technical problems that he encountered. At Oxford he worked in on gas sensors and is continuing the same work here. In England he visited groups working on similar problems at Dublin and Cork and is still in touch with the group at Cork. He holds two patents based on his collaboration with Scholars in Oxford and published five papers in collaboration with the group there. Pandurangappa recently went on to co-author a paper with Compton, even though he has not returned to England after completing a post-doc. On his return to his parent department at Bangalore, he spent quite some time building his laboratory, but was nevertheless promoted for the work he did at Oxford, and subsequently went on to obtain funding from the a Department of Science and Technology to the tune of Rs. 1.3 million. Research is an integral part of the teaching culture of Bangalore University and Pandurangappa publishes about 2-3 papers per year and has created a research programme in the area of gas sciences at his department. He is now going to start a new specialization - M.Sc. in applied chemistry from 2007-2008. It appears that Pandurangappa was the last batch of the one year post-docs, for now the duration of the post-docs has been lowered to six months; this is clearly not enough since the first three months are spent in adjusting to the new cultural environment. Amongst the practices observed in England that he would like to replicate in his own research environment the following deserve mention: the mechanics of developing an interdisciplinary collaboration, and the timely management of research projects. However, he felt that the CSFP was good for fresh researchers; graduate and doctoral students. In other words, new programmes and Fellowships were needed for supporting arrived Scholars. In Oxford, Pandurangappa met a wide variety of Scholars whom came from different parts of the Commonwealth. It appears that the encounter with other Commonwealth Scholars was dependent upon whether the Fellow was stationed at a research institute or a university.

In the last two cases we observe that a State Agricultural University and State University located in one of the metropolitan towns of India, namely Bangalore appears to be able to provide an environment conducive for research and the development of an overall culture of higher education. Bangalore has a number of research institutes that have well developed institutions for scientific research and the proximity of these two universities to these institutions provides not just a model for emulation but a symbiotic environment for the development of higher education. This has an impact on the development of regional and state level universities.

7.4 The impact of CSFP on research institutes and central universities

In the light of the structural differentiation of higher education in India, the experiences of Fellows from the research institutes who have spent time in England is very different on returning to India. We present here some of the interviews conducted with Commonwealth Fellows now working at the Sree Chitra Tirunal Institute for Medical Sciences and Technology, Trivandrum, an advanced national research institute⁶⁵ Both Niranjana, working with the Biomedical engineering group and Roy Joseph, with the group working on polymeric materials were employed at this leading medical institute. In applying for the Commonwealth Fellowship they benefited from the institute's reputation, its specialization and in Niranjana's case the contacts were rendered possible through the institute's activities. Thus both were able to maximize their learning experience simply because they were already settled in as investigators by the time they arrived in England. Both of them now count publishing papers as an important component of their research programme at the institute where they work. They also seemed to benefit from the standing of the research groups they worked with at the universities where they registered for their doctoral degrees. In addition to widening their cognitive horizons both also felt that the stint in England helped them widen their cultural horizons; they learned to share their research results with other researchers and acquired a refreshing openness to other points of view.

Regarding problems of reverse acculturation when they returned, they felt that since they had already worked in laboratories in India they had few problems adjusting and retuning themselves to the Indian environment. Some of them already had research problems and groups in place that they took over as soon as they finished their doctoral studies. However, when they went to England there were common experiences both recounted independently. Firstly, the absence of any resource constraints in undertaking and repeating experiments and the ability to repeat experiments ensured that their experimental results were reliable. In India there were tremendous resource constraints which not only slowed down their work on account of the fact that there were delays in procuring material and apparatus, but that England had a different way of looking at technology and developing technology. Both felt that in terms of science they were not far back, but in terms of technological capabilities in purely logistical terms England was ahead of India. The stint in England widened their technological repertoire and enabled them to benchmark their future efforts in India. Secondly, both were working in advanced areas where the size of the community in India did not exceed more than ten people or three groups scattered throughout the country. Internationally, the size of the community both felt in the specific field of their specialization was no more than about 150-200 researchers.

In terms of their sense of the Commonwealth it appears that other than one occasion they never felt that they belonged to any such supranational identity. The only other Commonwealth Fellows they seemed to know were other Indians, and amongst them other engineers or scientists. Neither of them mentioned familiarity with any Fellow from Australia, Canada or any of the African countries.

Whereas Niranjana came from a middle class family that was able to provide handsomely for his education it had no money to send him abroad for education. Roy on the other hand came from what he described as a "lower middle class family", and for him the Commonwealth award was a god send, since he could never have dreamed off studying in the United States or the United Kingdom. The pursuit of a doctoral degree did not just enrich their scientific and technological skills but was essential for their professional advancement. The fact that they were Commonwealth Scholars endowed them with additional symbolic capital within their research institutes. Both felt that their stint at the Commonwealth certainly contributed to their sense of self-worth and self-confidence. This was partially a realization of the fact that the nature of doctoral supervision was not in the nature of spoon-feeding or hand-holding. This was cause for some disconcertion at the beginning, but having reckoned that this was the practice they were quick to adapt to their benefit.

The cardiologist Shivshankaran was sent to be trained so that Sree Chitra Institute could branch-off into a new sub-discipline. However, Shivshankar unlike the previous two Fellows was already a publishing medical specialist before he left; but after his stint at Guy's Hospital, London he felt that the quality of his papers improved and that it has been easier for him to publish papers. He has also been able to organize two workshops with the people he trained with in England and it appears that with the passage of time a more substantial relationship might develop between the two institutions. Recognition from the international medical community is reflected in the fact that he is asked to referee papers both nationally and internationally. At his hospital he is respected amongst his colleagues as somebody who has pioneered a new specialization within the institute and he feels that within a

⁶⁵ Radhakrishnan, Kurupath (Ed.), 2004. Silver Lines: First 25 Years of the Sree Chitra Tirunal Institute of Medical Sciences and technology, Trivandrum, Kerala, India; Trivandrum.

couple of years he has shall have a veritable “team” at the institute. The Institute has pioneered new trends in pediatric training and inaugurated the discipline in India.

Shivashankaran too felt that there was little sense of the Commonwealth amongst the Fellows, but the overall feeling is that the Scholarship and Fellowship programme is a good one, and that the duration of the Fellowship and Scholarship should not be reduced since that will reduce the quality of the training. The opinion at the institute is that steps should be taken to ensure that a few quality doctors are sent for training rather than broad-basing the programme by lowering the qualifying standards of excellence. Another fact that surfaced was that Trivandrum and Ernakulam, as well as a number of South Indian cities have very active chapters of the Association of British Scholars which meet every once in a couple of months. This also serves as a forum for the Commonwealth Fellows to get together.

We close this section with a discussion we had with the Director of the Institute Dr. K.Mohandas, himself a former Fellow and an important official of the Association of Commonwealth Universities. Like his colleague, Shivashankaran, Mohandas too went on a CSFP Fellowship, to Guy’s Hospital to enhance his professional repertoire. He was already an associate professor at the time. He feels that the responses of Fellows to the programme are dependent upon the kinds of institutes from where they depart. Whereas everybody unilaterally expressed the idea that the Fellowship enabled them to widen their horizons, Mohandas felt that coming from a high-tech institute like SCI, the exposure in England at his level was not so much technological as it was in the new culture of health care management and recrafting the persona of the doctor from one who spoke down to his patients to one who shared his expertise with his patients. Secondly, the year he was awarded the Fellowship the candidates were not interviewed. The Shastri Bhawan forwarded the applications to the U.K. and the programme then responded if the candidate’s application was successful. Mohandas has also been chairperson of the Association of Commonwealth Universities, which he feels has also contributed to the quality of higher education in India though it has done so in intangible ways. The emerging relationship between the CSFP and the ACU is an important one that we shall leave for another study. It appears that at the moment that the CSFP has sub-contracted the running of the programme to the ACU.

The situation in the social sciences is substantially different. This is so because just the quantum of research publications in the natural sciences and engineering swamps those in the social sciences and humanities, an indication also of the divergent sizes of the two communities. Furthermore, and here there is a parallel with the natural sciences, most research activity is pursued in the Central universities and since the late 1970s in social science research institutes funded by the Indian Council for Social Sciences Research. The Commonwealth Fellows we interviewed largely belonged to the Central universities which already had established research groups and units in university departments. These scholars then returned to an already functioning environment and enriched it with their own experience. Palit, Varma and others attempted to orient, as much as they could, their teaching programme on the lines they had been tutored. Thus more than the prestige associated with the Fellowship they benefited from the work they produced at the doctoral level, and more importantly from the fact that they pursued this research at centres such as Cambridge University, that were rated high amongst their peers in India. The students of these Commonwealth fellows also later went to England on Commonwealth fellowships. Thus, reproducing the cycle of influence.

8 CSFP and India

8.1 CSFP and higher education in India

There could be two ways of looking at the impact of the Fellowship programme. On the one hand to benchmark the accomplishments of the beneficiaries of the programme with respect to the objectives of the Commonwealth Council. The other way, which is not mutually exclusive, is to see what the Fellowship has come to mean in the diverse contexts of science practised on the Indian subcontinent. In effect this means examining how the Fellowship and Scholarship holders have readapted to the institutions of higher learning, teaching and research in India. The conversations and interviews with the former Commonwealth Fellows now employed at premier research institutes as well as the leading metropolitan ones suggests that the Fellowship has become a very important programme since it provides a mechanism for professional advancement: one major incentive appears to be that it does not require clearing expensive entrance examinations to qualify for study in the UK and Canada, since these examinations could prove inconvenient for those already employed in a variety of environments of higher learning. The mechanism then works best for those who have some work experience. Secondly, the recipients of the

Fellowships often returned with the experience of, for example, having worked in another hospital culture, acquired an enhanced set of skills, enriched their scientific and technological repertoire, and augmented their self-confidence and professional status. Similarly, in the case of the agricultural colleges, the Fellowship offered a path of professional advancement in research areas where research facilities were lacking in their own universities. However, the overall impact of the scheme was greater at the premier research institutes than at the state universities, since the Fellows from the former were able to translate the experience into the building of new sub-disciplines, capabilities, and research and training programmes; whereas the Fellows employed at state universities and state agricultural universities ran into a wall of bureaucratic indifference and paucity of resources for teaching, research and travel.

In the social sciences on the other hand while the research institutes have come to play an increasingly important role, a small number of central universities have a tradition of research and the exposure of fellows abroad has certainly helped them to revise their teaching programmes and build networks of research that enable the reproduction of their respective disciplines. Nevertheless, there appears to be some reservation as far as the choice of research problems pursued in the UK or Canada is concerned. Unlike in the sciences, social science research problems are more or less framed by cultural contexts rather than articulated in the language of cultural universals. As a result the social science researchers felt that they were frequently directed towards research problems that were indicative of preoccupations in the West rather than were of interest in South Asia. While this opened them up to research concerns in the West, the price paid was a departure from problems considered to be of interest in South Asia. Furthermore, some scholars indicated that they were sometimes dissuaded from studying Western societies and literatures and persuaded to focus on subject areas that were localizable to South Asian contexts. This tension between contexts of socialization of the scholars themselves and the research priorities of institutes and centres of higher learning in the UK and Canada was cause for some consternation in the social sciences.

8.2 How has India viewed CSFP in terms of its value for the country?

Broadly speaking, we could identify two important uses of the Plan for a developing country like India, (i) promoting development through development-related education/research and (ii) strengthening capacity in higher and professional education. In the Indian case the two objectives have always been seen as being interlinked. As discussed above in section 2, higher and scientific education was an important element in the nehruvian paradigm of development planning. Development of local institutions of scientific education was seen to be of crucial significance for India to get out of the dependency structures of the world economic system and emerge as an independent and self-reliant nation. To put it in other words, the two objectives clearly merged in the Indian context.

Apart from the developmental dimension of CSFP, it has also been a subject of strategic concerns for the Indian government in terms of its relations with other countries of the Commonwealth. This is particularly so when India acts as host country for Commonwealth Fellows/Scholars. The number of Fellowships/ Scholarships to be offered to different members of the Commonwealth is, for example, decided by the Ministry of External Affairs and such fellowships/ scholarships are invariably seen as being a part of the cultural exchange programmes. However, such decisions have also become a matter of routine. As the director of ICCR informed us:

We have some fixed quota for each country and that is normally not changed. Though we work under the Ministry of External Affairs, ICCR is an autonomous body and there is not much interference in our everyday activities.... Since UK is the parent country, the number of seats for them is quite large.

Strategic questions are also taken into account while deciding about the disciplines of study for which Indian citizens are to be sent abroad as Commonwealth Scholars/Fellows.

8.3 Some suggestions

While it perhaps makes sense to have a different agency to deal with the outgoing and incoming Fellows/Scholars, there did not seem any reasonable justification for giving the job of sending Scholars/ Fellows from India to two different agencies, viz. the Ministry of Human Resource Development (MHRD) and the University Grants Commission (UGC). As mentioned above, MHRD has a section dealing exclusively with CSFP with a full-time staff of seven to eight members. In our judgment, University Grants Commission, which deals with several other educational exchange programmes for the Government of India could also be asked to do the

entire work. Of the two agencies, the selection process also seemed more open and professionally managed in the UGC. It is always good to give such work to a professionally organized body like the UGC than a completely bureaucratically controlled system.

Another important point that emerges from our work is the need to be more sensitive to the internal diversities and inequalities of the Indian society. The CSFP visitors from India seem to mostly come from traditionally more advantaged groups and communities. Representation of candidates from Dalit groups and religious minorities, particularly the Muslims, seemed negligible. While we do not wish to advocate a system of quotas for such categories, the Commonwealth Trust can certainly make a case for the selection process to be made more inclusive.

Number of women in Indian higher education has also seen a significant increase over the years and it may be worth our while to see how it is reflected in the number of applications received from women candidates for the Plan and the number of women selected to go abroad.

Finally the context of globalization and its implications for the higher education should also not be ignored. One of the objectives of the Associations and Foundations established after the Second World War was to bridge the knowledge gap between the developed and developing world, and the arena for this rapprochement was higher education and the development of human resources. However, sociologists of science since the 1960s have been speaking of how centre-periphery relations structure the world of knowledge production⁶⁶. Post-colonial theory of science has revealed the operation of centre-periphery relations within the world of science, in particular between the centres of science in the West and the periphery within the developing world. But as we see in India, the world of knowledge production within the periphery is itself structured in terms of centres and peripheries⁶⁷. The recognition of the layered nature of the phenomenon then provides a mechanism for studying the impact of programmes such as the CSFP in India. On the other hand, the recent “rise of the East” books announce a gradual movement of the centres⁶⁸. Will the shifting of centres alter the way we examine such exchange programmes and their impact?

⁶⁶ Joseph Ben-David. 1984. *The Scientist's Role in Society: A Comparative Study*. Chicago University Press.

⁶⁷ Dhruv Raina. 1996. “Reconfiguring the Centre: The Structure of Scientific Exchanges Between Colonial India and Europe”, *Minerva*, 96.

⁶⁸ Susantha Goonatilake. 1998. *Toward a Global Science: Mining Civilizational Knowledge*, Vistaar Publications: New Delhi.

Appendix One: Foreign scholars in India

Table A.1-1: Foreign scholars in India

Australia	20
Bangladesh	7
Barbados	9
Bostwana	1
Canada	38
Cyprus	4
Fiji	44
The Gambia	1
Ghana	29
Guyana	16
Jamaica	1
Kenya	43
Malawi	5
Malaysia	31
Malta	2
Mauritius	119
Namibia	2
New-Zealand	11
Nigeria	8
Pakistan	1
Papua New Guinea	1
Sierra Leone	3
Singapore	4
Sri Lanka	66
Tanzania	32
Tonga	6
Trinidad and Tobago	25
Uganda	44
United kingdom	86
Western Samoa	1
Zambia	11
Zimbabwe	1
Total	672

Appendix Two: Questionnaire

1. Name:
2. Age:
3. Age when selected for CSFP.
4. Sex: male/female
5. Marital status when selected for CSFP: married/single
6. Current Occupation (if superannuated, at the time of superannuation):
 1. University Teaching
 2. College Teaching.
 3. Researcher with a Research Institute.
 4. Bureaucracy/ Government service
 5. Working with civil society organization/ NGO
 6. Private company.
 7. Independent professional/consultant.
 8. Working with a hospital or any other agency involved with public service.
 9. Any other (please specify)
7. Broad area of study in Higher Education:
 1. Scientific research and teaching
 2. Technology
 3. Medicine
 4. Social sciences
 5. Humanities, languages, literature and art.
 6. Vocational/ Professional
 7. Any other (specify)
8. Occupation at the time of selection for Commonwealth Scholarship/Fellowship:
 1. Full-time student.
 2. Employed full-time
 3. Employed Part-time
9. Year of Fellowship/Scholarship awarded?
10. What was the duration of the Commonwealth Scholarship/Fellowship?
11. Was it your first visit abroad: 1. Yes. 2. No.
12. How many times have you gone abroad after completing the term of the Fellowship/Scholarship?
 1. Once
 2. Twice
 3. Thrice
 4. 4-5 times
 5. 6-10 times
 6. More than 10 times
 7. Never.

Perceptions:

Below are a few questions on your perceptions on different aspects of the Scholarship/Fellowship Plan. You may choose any of the following as your response:

- | | | |
|-------------------|--------------|-----------------------------|
| 1. Very positive; | 2. Positive? | 3. Marginally positive; |
| 4. No impact; | 5. Negative; | 6. Can't say/not applicable |

13. Impact of the Commonwealth Scholarship/Fellowship on your professional career.

1. 2. 3. 4. 5. 6.

14. How did your being on the Fellowship/Scholarship influence your salary/prospects for promotions?

1. 2. 3. 4. 5. 6.

15. How did your being on the Fellowship/Scholarship influence invitations to you to participate in national seminars/workshop?

1. 2. 3. 4. 5. 6.

16. How did your being on the Fellowship/Scholarship influence invitations to you to participate in seminars/workshop abroad?

1. 2. 3. 4. 5. 6.

17. Impact of the Commonwealth Scholarship/Fellowship on your personal attitudes.

1. 2. 3. 4. 5. 6.

18. Role of the Commonwealth Scholarship in enabling you to integrate into academic and or professional networks within India.

1. 2. 3. 4. 5. 6.

19. Role of the Commonwealth Scholarship/Fellowship in enabling you to integrate into academic and or professional networks internationally:

1. 2. 3. 4. 5. 6.

20. Role of the Commonwealth Scholarship/Fellowship in acquiring membership of Academies and Learned Societies.

1. 2. 3. 4. 5. 6.

21. In terms of your research/teaching/professional skills what was the influence of the Scholarship/ Fellowship?

1. 2. 3. 4. 5. 6.

22. How did your being on the Fellowship/Scholarship influence your chances of getting international research grants?

1. 2. 3. 4. 5. 6.

23. How did your being on the Fellowship/Scholarship influence your chances of being invited to referee works of other Scholars?

1. 2. 3. 4. 5. 6.

24. How did your being on the Fellowship/Scholarship influence your chances of being appointed on selection committees?

1. 2. 3. 4. 5. 6.

25. How do you view the impact of CSFP on strengthening the institutions of higher education and research in India?

1. 2. 3. 4. 5. 6.

26. Did your experience of being on a Commonwealth Scholar/Fellow motivate you to alter the way you organized your research groups/teaching programmes/ businesses?

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.

27. Your perceptions on the selection process:

1. Very fair, open and completely unbiased
2. Reasonably fair and unbiased
3. Open only to some privileged categories of people
4. Very exclusionary and completely biased
5. No opinion.

28. Was the award of Fellowship/Scholarship to you reported in newspapers?

1. Very widely.
2. Only in local papers.
3. Not reported.
4. Not aware

Personal Profile

29. Your religion:

- a. Hindu
- b. Muslim
- c. Christian
- d. Sikh
- e. Buddhist
- f. Any other (please specify.....)

30. How is the caste you come from traditionally ranked?

1. Upper
2. Middle
3. Backward
4. Scheduled Caste
5. Scheduled Tribe
6. Not applicable

31. What was your economic background when you were selected for the Scholarship/Fellowship?

1. Upper
2. Upper-middle
3. Middle
4. Lower middle
5. Poor/working class

32. In class terms where would you place your family now?

- 1 Upper
- 2 Upper-middle
- 3 Middle
- 4 Lower middle
- 5 Poor/working class

33. How did you come to know about the Commonwealth Fellowship?

1. Advertisement
2. College teachers
3. Peers
4. Parents/family
5. Other CSF awardees

34. Your Native Language (s):

Following are some open-ended questions. You may write your response below in your own words.

35. How would you like to describe the philosophy of Commonwealth and its meaning in the contemporary world? Did you during your Fellowship/Scholarship get a feeling of having a link or identification with the wider community of Commonwealth nations?
36. Did you continue to maintain research links with your overseas university after returning to India? If so can you outline these and say how important they have been in your professional career and personal life.
- 37: What difference did it make in the short, medium and long term to your career? Can you give specific examples?
38. Did you face any difficulties re-integrating into the work/research environment in India on your return? If so what was the nature of these difficulties?
39. Did you feel the need of changing your job after return and for what reasons? If yes, did you actually do it?
40. What is the relevance of the CSFP in the India of today?

Appendix Three

Names of respondent awardees who returned the questionnaire: omitted from this version

Appendix Four

Names of respondents interviewed: omitted from this version

Appendix Five: Some prominent award holders

1. Prem Kumar Khosla : Senior Scientific Advisor, Biotechnology, Himachal Pradesh Government, Shimla, Himachal Pradesh.
2. Moogina Ravindra : Head, Components Division, ISRO satellite Center, Manglore, Karnataka.
3. Satyendra Prakash Kaushik : President, Indian Association of Surgical Gastroenterology, Cochin, Kerala.
4. Bela Shah, Chief/Senior Deputy Director General, Division of Noncommunicable Diseases, Indian Council of Medical Research, New Delhi.
5. Satish Kumar Sharma, Financial Adviser and Director, Central Reserve Police Force, Ministry of Home Affairs, Government of India, New Delhi.
6. Madan Mohan Verma, : Director, Directorate of Vanaspati, Vegetable Oils and Fats, Government of India, New Delhi.
7. Ravindra Bapat : Director, Hafkins, Lower Parel, Mumbai. Former Vice Chancellor, Mahatama Gandhi Medical University, Mumbai.
8. J.G. Borpujari: Senior Associate, Office of the Simon Chair in Political Economy, Washington.
9. Bhaskar Rao Chava: International advisor, Royal College of Physicians and surgeons at Glassgow.
10. M L Goyal : additional General Manager, CMC ltd.CMC Limited PTI Building, 5th Floor, Sansad Marg, New Delhi, India.
11. Sham Sundar Gurnurkar: V.C. NTR University of Health sciences, Andhra Pradesh.
12. B. M. Hegde : V.C. Manipal Academy of Higher Education, Manipal, Karnataka.
13. Vaidyanathan : Director, Cancer Institute, Chitranjan, West Bengal.
14. Ravi Srivastave: Professor of Economics, CSRD, Jawaharlal Nehru University, New Delhi and member, Commission for Informal Sector Labour, Government of India.