
III CHANGES IN HIGHER EDUCATION,
RESEARCH AND SCHOLARSHIP
IN THE DEVELOPING AND
MUSLIM WORLDS SINCE 1983

1 *The State of Higher Education in
Developing Countries in 1983*

The Harvard Committee devoted some 30 pages of its report to a survey of higher education, research and scholarship in South and South East Asia, the Middle East and Africa.¹ The judgements of this Committee on the state of higher education in 1983 in the arc of countries from Indonesia to East Africa were severe, but based on extensive evidence and testimony. The Committee found [pp.8ff in its report] that there was much disillusionment and concern over the state of Third World higher education by the early 1980s. There had been great enthusiasm for higher education and rapid expansion in the 1950s and 1960s that were followed in the 1970s by concerns about unemployed graduates and doubts about the contributions of higher education to development. There was in most places - and even in Africa - not a clear case for adding to the quantity of higher education then available. Most of the Third World universities of the time, except in the Philippines and a few other countries, were public universities. They were often politicised and disorderly; or, alternatively, they were subject to close and repressive control by governments. In Pakistan, the Committee's chief consultant was told by a high official and former vice-chancellor that he :

"... found 'total ruins' in education. The teachers are not dedicated and seem chiefly engaged in making money on the side. The creation of Pakistan was the destruction of its higher education; the students played a big role at the time and are now 'hooked' on their political significance. There is little hope for the public universities, state or federal. The Government does not care about the quality of education. It wants law and order. There is no support for those who care about quality; the students and Government are against anyone who tries ... etc. etc." (quoted at p.11)

There is a large literature on the sources of such problems in the public universities of developing countries some of which the Harvard Committee used. It suggested that a private university like AKU could be less vulnerable to malfunctioning but only if certain conditions were met, the long history of student unrest in private colleges in India showing that private

¹ It had in its membership extensive experience it could use as a basis of judgements : Derek Bok, himself, had made the internationalisation of Harvard a major aim of his presidency and had been personally engaged in efforts to improve Latin American universities; Dwight Perkins was a leading authority on the economy of China and director of the Harvard Institute of International Development; David Bell had been head of the US foreign aid programme and of the Ford Foundation overseas development programme; Edward Keenan knew Central Asia and the Middle East; Harvey Brooks was a leading authority on scientific and technological development throughout the world; and Francis Sutton, the principal consultant for the Committee, had devoted many years as a Ford Foundation officer to work in and on the developing countries.

status alone is no assurance of peace and quiet. The quality of higher education from Indonesia to Africa was generally undermined by overcrowding of institutions, inadequate facilities, and the poor motivations denounced as vigorously in other countries as they were in Pakistan. Exceptional institutions were noted, like the Indian Institutes of Management or the Indian Institutes of Technology, where selective admissions and excellent job prospects make for serious study and solid achievement. But these were few and the Harvard Committee concluded that adding an AKU as an institution of integrity and educational quality would be valuable, particularly if it served as a model and was emulated.

2 *The State of Research and Scholarship*

In the Muslim and developing worlds in 1983 it was found to be even less satisfactory. At the Aga Khan's urging, particular attention was given to evidence on the state of scientific research in the Muslim world; the relevant literature was consulted; Mr. Sutton made inquiries in several countries, and with Professors Abdus Salam, A. B. Zahlan and other specialists on the subject; a special paper was contributed by professors at Harvard and Boston University who had extensive knowledge of the Middle East. The results of these studies generally confirmed what President Zia-ul-Haq of Pakistan said (in another connection) at the time: "Today .. one was constrained to admit that the Islamic world was almost a non-entity in science .. we are trailing not only behind the technologically advanced nations in a situation of perpetual dependency, but also have the unhappy distinction of being at the tail-end even of the developing world" [ref. at p.26]. Thanks to the scanning of several thousand journals at the Institute of Scientific Information in Philadelphia, it was possible to give quantitative measures of the lagging of the developing and Muslim worlds behind the industrial countries. Evidence was also found that their poor scientific productivity was not due to a dearth of scientists; as Zahlan wrote, "The total research output is low and out of all proportion to the number of physicists, mathematicians and chemists employed in the Arab world, to say nothing of the number of universities offering instruction in these fields". [Quoted at

p.26]. The obvious conclusion from this study, as from many others, was that the lack of an "enabling environment" for research in the developing countries was more important than lack of trained talent.

Much of the evidence that the Harvard Committee examined had to do with the sciences, but an effort was also made to assess work in the social sciences, using a Rockefeller study and a powerful article by Professor Mohamed Arkoun which appeared at the time. The results were a bit less depressing than in the sciences but not reassuring either. The general climate in most countries was unsympathetic or actively hostile to research and scholarship that did not have evident practical application or that questioned conventional views and official doctrine. As in the natural and biological sciences, basic or theoretical work was rare. The Rockefeller study found few social scientists "widening intellectual perspectives, liberating society from its myths and illusions, or conceptualising development issues"; and Arkoun found analyses condemned to repeating "the forms of thought and interpretation of normative Islamic discourse, sprinkled with modernist terms".

The Harvard Committee's report concluded its views in a paragraph with warnings that may have sufficient pertinence for future policy in AKU to merit quotation here :

"There are those who argue that the present situation is about as it must be, given the urgent practical needs of the developing countries. The needs of these countries for research and evaluation have been very great and universities have had to show their governments they were not indifferent to them. It very well may be that only through heavy commitment to research work that does not directly support academic instruction or probe deeply into matters that illuminate the nature of their societies or indeed break new ground in their discipline, can universities justify themselves to their surroundings. But there are evident costs - in failures to adapt instruction to the cultural and social setting, and in providing their societies with deeper understanding of their nature and problems. There are also costs in not developing the capacity to train scholars and researchers in fashions appropriate to the settings in which they work. Such

training requires reshaping of programmes that have been copied from elsewhere, and it can hardly occur without serious conceptual effort.” [p.34]

This brief summary of the Harvard Report’s findings on the state of research and scholarship in 1983 may serve to explain the emphasis on research that pervaded that report, as well as serving as a benchmark for the Commission’s effort to assess how the situation in the Muslim and developing worlds may have changed in the subsequent years.

3 The State of Higher Education in 1994 and Prospects for the Future

As the decade of the 1990s opened, the Institute of International Education in New York and the U.S. Agency for International Development (USAID) organised a conference to help assess what the needs and demand for overseas education might be in the coming decade. The report from this conference has been one of the documents made available to the Commission. [ed. Craufurd D. Goodwin, International Investment in Human Capital/Overseas Education for Development, Institute of International Education, New York, 1993.] Our secretary, Mr. Sutton, contributed a paper in that report that made an effort to envisage broadly “The World in the 1990s” and gave particular attention to “Education, Modern Knowledge and National Cultures in the Third World.” He found the evident uses of education for both national and individual advancement had continued to produce “an extraordinary demand for schools and universities” which national leaders felt bound to respond to. The pressures to over-expansion in higher education which the Harvard Committee observed were continuing :

“Political leaders have found the demands of their citizenries for higher educational opportunities irresistible, and the common condition of overcrowded, ill-equipped and frequently turbulent institutions of advanced education have resulted. We have had the melancholy spectacle of countries as poor as Sudan, Madagascar, Kenya, and Tanzania planning new universities when they lacked the means for adequate support of what they already had.”

The resulting “glut of diplomas” in the Third World had been combined with a pained awareness that even a relatively few university graduates in a poor country can produce glut in the market for employment. The UNESCO World Education Report (1993) may point out that Tanzania has only 21 students in higher education per 100,000 population whereas Canada has 5,102; but this disparity does not imply that producing more Tanzanian graduates would in any early future be a rewarding investment in that country. The sense of inequity in the denial of educational opportunity to citizens of poor countries has, in recent decades, been countered by arguments that higher education chiefly benefits a favoured minority at the expense of the population at large. The World Bank has used cost-benefit studies to show that investments in primary or secondary education in developing countries bring higher social benefits than investments in higher education. It has correspondingly argued restraint in the expansion of higher education and has found sympathetic agreement among other agencies engaged in development assistance.

The argument in the Harvard Report that adding the Aga Khan University to the array of universities serving the Muslim and Third Worlds could not find justification as a mere quantitative addition thus finds continuing support.

There may be legitimate argument whether the average quality of higher education across the Third World is better or worse than it was in 1983. But in areas of particular concern to the Aga Khan University, there seems a clear case for worsening. The deterioration of the African universities as economic conditions worsened in the 1980s has been notorious. Our Secretary’s report on his visit to Nairobi in June 1994 included lamentable particulars on the collapse of higher education in Kenya, where overly rapid expansion with limited resources has led to student and faculty strikes and the closure of the five national universities for much of the past two years. And one finds a Pakistani newspaper article in 1993 echoing the laments heard in 1983, indeed generalising to declare that all through South Asia, “the system of higher education has collapsed”. [Dawn, November 21, 1993, p.15] But it is not necessary to argue

that there has been serious further general deterioration of higher education across the parts of the world of interest to us to conclude that there is a continuing need for institutions like AKU that bring not merely quantitative additions but new elements of quality in higher education.

3.1 *The Growth of Private Higher Education Since 1983*

Since AKU was established there has been a significant strengthening of the place of private higher education in the Third World². The establishment of AKU came at a fortunate time when new sympathies for private higher education were appearing after decades of resistance. AKU has had a pioneering role in Pakistan, its good example encouraging the birth of several new private institutions. The growth of private higher education in Pakistan has been part of a trend toward privatisation of higher education that has been notable in both developing and industrial countries.

One motivation has been the desire for better quality that has inspired the founding of AKU. Another driving force has been the mass demand for higher education that has strained public resources and led to efforts of many sorts to supplement them. Both rich and poor countries have felt pressures to move away from traditions of essentially free higher education and make the beneficiaries of higher education pay some part of its costs. In the developing countries, European traditions of free higher education were strengthened in the decades after World War II by egalitarian nationalism, with resulting strong resistances to fee-paying private institutions or private cost-sharing. The sharp distinction made in Meiji Japan between free public education for the needs of the state, and fee-paying private higher education for individual advantage was made nowhere in the Third World. But what we have called the irresistible expansion of higher education has brought changes of attitude and policy in recent decades, as governments have been forced to seek ways to share its costs with private wealth. Sharp resistances have appeared in many places, rich and poor. In Egypt, recent efforts to relieve the disastrous state of public higher education by allowing the establishment of a private university (or universities) have been

opposed on the moral grounds that ability to pay fees should provide no advantage in access to higher education. And in Europe we read that a contributing cause to the March-April 1994 demonstrations against the French government's proposal to change the minimum wage for young people was anger in the public universities over proposed increases in the public support of private schools [*Corriere della Sera*, April 2, 1994, p.9]. Such resistance has produced tactical retreats, but the overall trend has been toward increased recourse to private cost-sharing and private institutions in higher education, a trend that has certainly been strengthened by the rising legitimacy of private institutions throughout national societies. A pragmatic realisation that the dual objectives of remedying deficiencies in quality while widening opportunities for higher education require the growth of private higher education has now largely overcome the hesitations of past decades.

The recourse to private institutions both as a way of responding to the powerful demand for higher education and as a means of achieving special quality is certainly no transitory feature of the 1990s. We expect it to continue for decades to come, and to provide the Aga Khan University with opportunities to serve as an influential model in many countries. The academic level of many - perhaps the great majority - of new private institutions may be as poor as has been common in the Philippines, or Indonesia, or Brazil. But the growth of a substantial private sector in higher education may permit the emergence of the healthy educational diversity that has been seen in the United States, Japan, or the Philippines, with competition and emulation acting as steady forces for academic improvement. In such situations an institution of high quality, such as AKU aims to be, can exert a broad influence in whole national systems. One of the serious difficulties faced by private higher education in many developing countries has been the principle of uniform national standards in degrees. This carryover of European practice will have to be eased if the creative variety that a private higher education sector potentially offers can be realised. Fortunately, there are signs of new interest in differentiation and variety which we can now relate.

² Cf. Roger L. Geiger, *Private Sectors in Higher Education*, Ann Arbor, University of Michigan Press, 1986; *ibid.*, *Privatization of Higher Education: International Trends and Issues*, Princeton, International Council for Educational Development, 1988.

3.2 *Quality and Differentiation in Higher Education*

It used to be said that ministers of education in Third World countries were so interested in quantitative expansion of education that they could not be persuaded to worry much about quality. Pressures toward uniform treatment of institutions in national systems have also put difficulties in the way of maintaining higher quality in at least some institutions. Leading national universities like Delhi University in India or the University of the Philippines have sometimes been able to maintain standards well above those common elsewhere in their countries, and special institutions like El Colegio de Mexico or the Indian Institutes of Technology have had distinguished programmes and achievements. But such examples are not numerous, and one could point to efforts to build "Centres of excellence" that fell back, after a time, to the common standard (as was heard in 1983 about the Quaid-i-Azam University in Islamabad). It has generally been difficult, particularly in the egalitarian atmosphere that has been common in developing countries, to sustain diversity in the standards and character of public higher education.

As dissatisfaction with the quality of higher education has spread, there have been efforts at diagnosis which have frequently pointed to the unsuitability of imported Western educational models in the cultures and conditions of Third World countries. In the 1950s and 1960s there was criticism of models imported from the European colonial powers, which criticism gave opportunities to Americans to offer their land-grant universities and four-year undergraduate programmes as alternative models (while Soviets built technical institutes with competitively elaborate equipment). In the radicalism of the 1970s there was enthusiasm for the "developmental university" that was more engaged in national development programmes than universities had hitherto been. (The Harvard recommendations for AKU to devote itself to "generic problems of development" may have borne traces of that 1970s enthusiasm.)

Educational systems, however, tend to be remarkably conservative and difficult to change, so that patterns imposed in the colonial era persist

to the present. And since they have lasted more than a generation of national sovereignty thus far, one must face the prospect that they may not change radically in the quarter century we are looking ahead.

Continuing efforts are nevertheless being made to find better and more rewarding patterns of higher education. A movement in recent years that has evident relevance for AKU has been the establishment of Islamic universities, not specifically for the training of religious specialists, but as an alternative to existing universities built on Western models. Two such institutions have been brought to our particular attention. Description of their aims and character may serve to indicate something about the existing competition and range of possibilities for AKU as a Muslim university.

Our first example is The Al al-Bayt University (The House of the Prophet University) at Mafraq, Jordan.

This is a new institution, established pursuant to a Royal directive, dated 17 August 1992; it was to begin its first classes in September 1994³. This university, though a governmental establishment of the Hashemite Kingdom shares some characteristics in common with AKU. It is open to Muslims and non-Muslims, males and females, at graduate and undergraduate levels. It aims to "teach the various sciences ... with a view to preparing the Muslim scientifically and religiously, at the same time". The royal directive found a division between those universities and post-graduate institutes in the Arab and Islamic world that used "scientific methodologies ... while others have concentrated on God-given codes and divine revelation, accepting parts and meditating on others, seeking from all enlightenment and guidance in this life". A new kind of university was declared to be an "urgent need", one that would combine the "requirements of scientific methodology on the one hand, and ... of belief and clarity of vision on the other". The decree challenged the division of modern culture in "Western and Eastern [parts] ... for modern culture is one universal culture".

From this position, King Hussein drew conclusions of remarkable breadth :

³The President of this new university Mohammad Agnan Al-Bakhit wrote to John de Monchaux as General Manager of the Aga Khan Trust for Culture, on September 26, 1993 seeking students, faculty, and collaboration in an international Concept Group, vaguely described but apparently playing an advisory (or promotional) role in the development of the university.

“Therefore, the Muslim’s field of vision must not be confined to his own history and culture and to propagating his own beliefs and values; its scope should be widened to include other cultures so that the Muslim may know where he stands and understand the role he can undertake to enrich modern culture with his own, without any debilitating sense of alienation or isolation, for only then will he feel that the world around him is more like a home to which he can resort and only then will the rest of mankind appear to him as one community, of which he is an inalienable member.”

In charging his Prime Minister with responsibility for setting up this Al al-Bayt University for Science and Humanities, King Hussein expressed the hope that it “will bridge the gap ... in the present higher educational system in both the Arab and Islamic Worlds and build the round Islamic personality which is at one with the spirit of the age and fully appreciates not only the nature of reason and science but also the nature of belief and spiritual values”. (*our emphasis*)

The resulting design as set forth by the university president is that of a very liberal institution, presenting “the true image of Islam as a way of life that does not seek to impose itself on others”. The aim is more explicitly for the education of Muslim personalities than has, at least thus far, been articulated for AKU. The decree says the language of instruction is to be Arabic (a point the university president does not make in his letter to de Monchaux) though other languages, of Islamic and non-Islamic nations may be used “wherever needed”. There is a specific relationship to the Arab world and an intention “to give special attention to scientific research including Arab-Islamic affairs, in particular”. Institutes for Islamic Architecture and Fine Arts, and for Astronomy and Space Sciences are planned. There is also something like a philosophical institute called the Bayt al-Hikmah Institute (House of Wisdom Institute) “which will be involved with the study of thoughts prevalent in the Islamic World”, along with faculties of arts and sciences, Islamic jurisprudence and law, and of economics and public administration. The university aims to provide its students with an education “enabling them to fulfil any of the roles of teacher, preacher, researcher and scholar”.

The motivations that have led King Hussein to establish such an institution at this time seem quite clearly stated in the documents we have received; there is a concern not to leave either the presentation of Islam or the personal and religious formation of students to exclusively religious or secular institutions; and to combine as far as possible “reason and science” with “belief and spiritual values”.

The Universiti Islam Antarbangan (International Islamic University), Selangor, West Malaysia.

This university was established in 1983 and was described briefly in the Harvard Report (pp.43-44) following on a visit by Mr. Sutton. The Commission has been informed on the nature and present state of this International Islamic University by Sharom Ahmat, who has contributed a memorandum on the subject.

This university was originally established by the Malaysian government in an effort of collaboration with the governments of several Islamic countries, notably Saudi Arabia, which are represented on its Board of Governors. The university is thus by constitution and intention international. It is more emphatically Islamic than the new Jordanian university though the original project proposal declared it was to be “NOT a university merely about Islam or a university teaching merely Islamic theology. It attempts to recreate and revitalise the ancient Islamic tradition of learning where to seek knowledge is an act of prayer, and the spirit of science emanates from the Holy Qur’an”. It is a university embracing in principle all fields of knowledge; in 1994 it had faculties of : economics and management; laws; Islamic revealed knowledge and human sciences; and education; it had a Centre for Languages and was planning a faculty of engineering to open in 1994 and of medicine to open in 1996. The constitution emphasises that these subjects are to be approached so as “to re-establish the primacy of Islam in all fields ... to revitalise the Islamic concept which considers the pursuit of scientific enquiry as inspired by the teachings of the Holy Qur’an”. There has been a strong emphasis on education that would develop “morally and spiritually strong, mentally rational, physically fit, and professionally equipped

individuals to develop the Ummah and achieve progress that is in harmony with Islam ...". The university, by its constitution, is "to propagate knowledge in the spirit of submission to Allah in order to develop professionals committed to Islamic teachings and who are also conscious of their responsibilities as obedient servants of Allah and His Trustees on earth".

The university is in principle open to both Muslims and non-Muslims and is intended "to widen the choices open to the Muslim Ummah". But only Muslims are to be recruited as staff "in almost all departments". Each faculty is to approach its subjects in accordance with Islamic principles and modes of thinking. The latest edition of *The World of Learning* (1993) credits this university with 472 teachers, 4,977 students and a library of 115,000 volumes. The principal focus is at the undergraduate level but there is an International Institute of Islamic Thought and Civilisations engaged in post-graduate research and teaching in Islamic thought and civilisations and on Western and Oriental thought and civilisations. Sharom Ahmat's memorandum describes a gradual process by which the university is becoming more Malaysian and less international. The expected support by the Saudi government fell away when the Saudis wished this university to be a branch of the University of Medina. Now that it is more dependent on Malaysian resources, Ahmat remarks that "the Malaysian bureaucracy treats the university like the other national institutions", and the numbers of non-Malaysian students and faculty have decreased.

These examples may serve to suggest the wide range of possibilities for Muslim universities at this time. We have not made a systematic survey of universities in the Muslim world but are aware of the situation in several countries. In Saudi Arabia there has been a clear distinction between universities that follow Western models, teaching secular subjects, like the King Abdul Aziz University in Jeddah or the University of Petroleum and Mining in Dhahran; and the Islamic universities of Riyadh and Medina devoted to Sharia, religion, and Koranic studies. We note that the Islamic University in Medina was called, at the period when the Malaysian Islamic University was being established, an International Islamic Foundation; in the 1980s, it had many more

international than Saudi students. In Egypt until al Azhar was forced by Nasser to change, there was a similar separation of secular universities and Islamic universities. In other countries the division has been less sharp, with faculties of Arabic, Islamic studies, or Sharia incorporated in Western model universities. Both the Jordanian and the Malaysian examples seek a type of university combining features of the Western secular university with Islamic religious education. In this sense both seek to be innovative; the Malaysian aim is explicitly "to widen the choices open to the Muslim Ummah in higher education". The purposes show a movement away from the earlier emphases on the uses of universities for national development. The builders of these Islamic universities are, like Cardinal Newman, as concerned with the making of good human beings as with providing manpower and technical knowledge for a growing society. The newer emphasis is more individual and cultural, and as such perhaps in keeping with trends that have appeared more widely throughout the world in recent years.

As with the trend to privatisation, the evolution of universities in the Muslim world may be following more widely prevalent patterns of change in the world. We will need to reflect on these changes and how they affect what universities need to do, but only after considering what has been happening since the early 1980s to research and scholarship in the Third World.

4 *The Present State and Outlook for Research and Scholarship in the Third World*

In directing that the new al Al-Bayt University be established in Jordan, King Hussein opened with a reminder that, "Human knowledge in this age has flourished on all levels and expanded in every direction", and he saw the Arab and Islamic Worlds engaged in a struggle to keep abreast of this explosion of knowledge. Truman's Point Four declaration in 1948 gave classic expression to the hope that science and technology could remove poverty and destitution everywhere if it could be properly put to use. From simplistic first expectations that knowledge that had made the rich countries rich could be readily transferred to lift the poor countries, awareness has grown that the capacity to utilise

modern scientific and technical knowledge depends on the building of professional communities and institutions in the poorer countries. Simply to keep abreast of the new knowledge that sprouts in a thousand specialties poses formidable demands. And since creative application of available knowledge is not much different from the creation of new knowledge, the poorer countries seek to be not merely consumers of discoveries but contributors themselves.

We have summarised above the Harvard Report's dispiriting findings on the state of research and scholarship in the Third World at the beginning of the 1980s. In 1993, UNESCO issued a World Science Report, which continues to show enormous disparities between the rich and poor countries in expenditures on research and development, in numbers of working scientists and technologists, and in their productivity in scientific research. Using the same data base for scientific publications that was cited in the Harvard Report, the UNESCO study found the Middle and Near East (excluding Israel) contributing only 0.6% of world scientific publications in 1991; North Africa contributing 0.4%; and Africa South of the Sahara 0.9%. India, the champion of the developing countries on this score, had 2.0%. Taken all together these areas produced less than Canada's 4.4%. In comparison with 1983, the Near and Middle East and North Africa had improved somewhat, Africa held steady and India declined somewhat; but these were small movements from low positions.⁴

The UNESCO report shows increasing numbers of trained scientists and technologists in the developing countries, but also the familiarly low ratios of research and development expenditures to Gross Domestic Product. The chapter on South Asia unfortunately lacks instructive detail and that on the Arab States, while full of data, does not address scientific productivity. The chapter on Africa, by Thomas Odhiambo, for many years director of the International Centre of Insect Physiology and Ecology (ICIPE) in Kenya contains a poignant regret over loss of momentum and neglect of the proper functions of universities :

"By 1980 there were well over 400 research institutions in Africa. But they had not maintained the momentum that was evident in the 1950s and 1960s; nor had they provided the high-quality

education and relevant research that was desperately required to clear the main blocks to economic and social development. Indeed, the notion of a 'development university' did not establish itself at all in Africa. The attempts by the African university community 'to play a direct, short-term interventionist role in national development', beyond providing a high-level education and professional training, 'to justify its budget and special status in society' were largely unsuccessful. Rather than the needed partnership between government and university, conflict was generated between the two, as a result of 'idealistic notions of income redistribution and sharing of political power'." [p.94. The quotations are from an ICIPE publication on scientific institution-building in Africa.]

The constraints on research in the Third World from the lack of a supporting environment and intellectual freedom have persisted. Whether they are as severe as they were ten years ago is not an easy assessment. There are certainly countries like Algeria and Sudan where physical conditions and intellectual freedom have notoriously deteriorated, with outspoken intellectuals assassinated, and professors afraid to go to their universities.⁵ These are Muslim countries and two of the most disturbing examples where the rise of militant and intolerant Islam has worsened the conditions for intellectual work that Mohamed Arkoun was already deploring in the early 1980s. Even in Muslim countries where less intolerant forms of Islam prevail, such as Malaysia and Indonesia, the constraints on intellectual freedom remain serious, inhibiting the kind of work that is "widening intellectual perspectives, liberating society from its myths and illusions, or conceptualising development issues". The rise of assertive insistence on cultural differences has been very widespread and not confined to Islam, as recent polemics over universal human rights have shown. But the constraints and intolerance that have appeared in Islamic countries are certainly among the more serious, and there is reason to fear that Muslim intellectual creativity may be particularly crippled by them.

Looking at the prospects for the next quarter-century requires reflection on broad changes that have been occurring in the world beyond the universities and research institutions. We venture onto this broad stage in the next

⁴ Figures from Table 3, p. 141 in the chapter by Remi Barre and Pierre Papon, "Indicators : Purpose and Limitations". For comparison, the European Union countries contributed 27.7%, the USA 35.8% and Japan 8.0%.

⁵ Dictatorial control in Sudan has not meant peace in the University of Khartoum. We read in the Times Higher Education Supplement, December 4, 1993, p.9, that the student council elections produced the worst riots for two years. "Windows and doors were smashed, telephone and electric lines cut, policemen and security guards pelted with stones, and the governing board and president of the university were besieged in their offices."

section of this Report and hope that our vision of the future of research and scholarship will become clearer thereafter. But at this stage it seems safe to anticipate no slowing of the world's pace of scientific discovery and advance. With the increasing sophistication and expense of scientific investigation the advantages of the rich leaders seem unlikely to diminish.

How much does this persisting and, perhaps, growing disparity matter? One might be tempted by reflection on the successes of East and South East Asian stars in the competition for economic development to conclude that it does not much matter, at least for a longish time. These are countries whose successes would appear to depend largely on the diffusion of well-known technologies or the migration of industries to take advantage of low labour costs; they are not countries (excepting Japan, of course) that are world leaders in scientific or even technological research. One might argue further that the openness to international markets and foreign investment that appears necessary in present conditions makes less important the possession of national scientific and technological competences than they have appeared to be in more autarchic pasts.

We take such views to be plausible in the strict sense, i.e., as falsely persuasive. Certainly, the progress of the developing countries will not depend on original scientific and technical discoveries that they make and exploit for themselves. An MIT economist recently observed in the Boston Globe that "Belgium is rich, not because it has invented a lot of technology, but because it has the human capital and social institutions that allow it to employ technology invented in other countries". If we add the recent calculation that Belgium's GDP is greater than that of all of Africa South of the Sahara excluding South Africa, we have an impressive measure of the importance of the "human capital and social institutions" that make possible the productive utilisation of things invented elsewhere. This capacity to absorb new ideas and techniques has many elements, but certainly among them is a professional community of scientists and technologists that is able to stay abreast of and assess the burgeoning new knowledge in many fields. The purveyors of technical assistance learned not long after Point Four was proclaimed that the transfer of knowledge would do no good

until there were those equipped to understand it and put it to use. And it was quickly found too that knowledge and techniques from elsewhere needed adaptation and specification when they were used in new situations; hence a realisation, in agriculture, the health sciences, economics and other fields that effective outcomes depended on local research, and hence on people and institutions capable of carrying it out.

There is ample evidence that the successes of the "East Asian Tigers" have depended on their capacity to educate (and to attract back from abroad) strong scientific and technological communities; and we may suppose that in this respect as in others they offer models for other developing countries. There may be legitimate debate about the balance between basic and applied science and technology appropriate at different stages of development. The complaint has commonly been heard that scientists and scholars in the developing countries set their ambitions too much on international professional recognition, to the neglect of the research needs in their own countries. The studies of the Harvard Committee we cited earlier generally contradicted this view, finding more weaknesses in basic than applied research, and seeing this imbalance as unfavourable to the local generation of national professional communities that successful development requires. In sum, we conclude that the lagging of the developing countries - and the Muslim countries in particular - in scientific productivity is a serious constraint on their potentials for development.

There is another reason for concern about the lagging scientific productivity of the developing countries. That prospering and rising nations will feel discomforts from being undistinguished importers of science and other kinds of culture seems probable. Nineteenth century Americans may have been coarsely indifferent to the sneer, "Who reads an American book?" One wonders if in 2000 or 2010 Koreans or Pakistanis or certainly Malaysians would shrug off a charge that "no one" reads a Korean or Pakistani or Malaysian book, however piously multicultural the world may become. Insistence on the basic right to equal status for peoples from all cultural backgrounds has been a pillar of our international system. And in recent years, particular emphasis has been put on cultural distinctiveness around

the world, as democracies have tried to be multicultural and more nations have found their voices. But the maintenance of a cultural distinctiveness in the modern world cannot be hermetic. It must be sustained in interaction with other cultures, and be subjected to their values. Thus both the International Islamic University in Malaysia and the new Jordanian university seek to be distinctively Islamic but competent and engaged in modern secular knowledge. They are behaving as other universities in other nations and traditions seek to do, though perhaps with the special intensity that the sense of Islam's world importance and brilliant history gives. Certainly within the Muslim world, a concern for achieving intellectual distinction recognisable in modern, international terms may be expected to persist strongly during the next decades, whatever the economic and political fate of Muslim countries.

5 *Implications of the State and Prospects of Higher Education and Research for AKU's Future Mission and Character*

We have other changes to examine and other considerations to weigh that may alter our conclusions, but we summarise here the tentative conclusions that the present and prospective states of higher education and research in the developing and Muslim worlds suggest.

- The Aga Khan University will not be needed as a sheer quantitative contribution to a generally overcrowded scene in higher education in the next quarter century. It must justify its worth through distinctiveness and quality.

- While there is unlikely to be substantial early improvement in the general quality of higher education in the developing and Muslim worlds, there is growing concern for better quality and more tolerance for differentiation in the quality and character of institutions. The implication is that what the Aga Khan University does educationally may have increased chances of gaining attention and influence in both public and private quarters.

- As a private university of good quality, AKU has opportunities to serve as a model in the upsurge of private higher education that is occurring and will continue.

- A search in the Muslim world for different and better forms of higher education, combining secular education with Islam is underway and will continue. It is evidently important for the Muslim world and a challenge to AKU as a Muslim university.

- The weakness of the developing and Muslim worlds in research and scholarship relative to the leading industrial countries remains very pronounced and unlikely to disappear in the coming decades. An Aga Khan University distinguished in research and scholarship would be a very distinctive and valuable institution in these worlds, both for the substantive contributions it would make and as a heartening example of creativity there.