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## ISRI Indian Streams Research Journal



#### HIGHER EDUCATION FOR A SUSTAINABLE DEVELOPMENT IN INDIA

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#### **ABSTRACT**

his paper argues that in the concept of Higher Education and Sustainable Development has a distinct character focusing Indian education system According to the United Nations in 21th century. Educational, Scientific and Cultural Organization's (UNESCO) Education is the basis for a Sustainable Development. It has become a social process of construction of a pedagogical object, plural, as full of contradictions as reality itself. The creation of an educational system which takes into consideration gender differences as well as differences among all sectors, whether it is formal or non formal education, to reach the noncommunicated communities, is considered as a fundamental element of Education for a Sustainable Development (ESD) for the last 40 years, Higher Education (EE) has played an important role in several discourses. For some, it has been more part of the problem than of the solution. Nevertheless, Education has become a source of inspiration for many of us. educators here in India, for instance, although doing different things and dealing with different needs, have been able to define strategies of pedagogical research, to build collective identities, to identify and share strategies to find common objectives and to persevere as we reach for them. In this way we considered many higher education indicators to educational sustainability in India.

**KEYWORDS**: Higher Education, Sustainable Development, India, Student Enrolment.

#### INTRODUCTION

The United Nations (UN) Decade of Education for



Sustainable Development (DESD) 2005-2014 states that 'Universities must function as places of research and learning for sustainable development. The government of the United Kingdom has answered in the affirmative. It's Department for Education and Skills "shares responsibility for learning about sustainable development." While encouraging universities to adopt sustainable practices the department also sees curriculum development as an important aspect in higher education with the opportunity to create informed graduates who are knowledgeable about sustainability and caninfluence others. Sustainable development has become an important issue on international, regional and national agendas concerning education policy over the past few years. Articulating the goals of Higher Education Radakrishnan Commission on University Education, 1948-49 put it in following words: "The most important and urgent reform needed in education is to transform it, to endeavour to relate it to the life, needs and aspirations of the people and thereby make it the powerful instrument of social, economic and cultural transformation necessary for the realization of the national goals. For this purpose, education should be developed so as to increase productivity, achieve social and national integration, accelerate the process of modernization and cultivate social, moral and spiritual values".

#### **EVOLUTION OF INDIAN HIGHER EDUCATION**

Indian higher education evolved along similar lines. The ancient education offered through gurukulas (mentor-centered schools) was religious and esoteric and it was exclusively offered to the privileged classes of society. With the expansion and institutionalization of higher education in universities such as Nalanda and Taxila, specialized knowledge, primarily religious knowledge, was pursued by Buddhist monks. Similar Sanskrit schools, and later madrasas, Muslim schools were devoted to Vedic and Muslim religious education respectively. Later oriental education in language, astronomy, performing arts and mathematics was imparted. As during the time of the renaissance, pursuit of knowledge was academic.

Western education was introduced with Macaulay's minute with the adverted purpose of developing an educated class of people to interpret Indian thought to the West. In reality, however, they served the East India Company through its civil services. English education, however, had the salient impact on Indian society of evoking sensitivity to self-dignity, selfhood as a nation, renewal of Hindu concepts and practices (otherwise termed by historians as 'the HinduRenaissance') and peaceful evolution of modern India with the help of informed leadership. During the post-Independence period the Western curricula could not remain isolated from the challenge of nation building. While technical and professional institutions were being developed, the curricula in colleges of arts and science responded to the varying emphases made by the Five Year Plans. First, physical sciences were introduced into the hitherto humanities curriculum, with economics and other social sciences following soon. The nation's involvement in global communities for trade and commerce led to the inclusion of commerce and management. With the development of computer science and information technology globalization of education has reached a new height. The time is not far off to find our nation speedily becoming the computer workshop of the world, in the sense UK was the 'shop-keeper of the world' during colonial times.

#### **QUALITY IN HIGHER EDUCATION**

Quality is often considered to be a standard or norm with which to compare two similar things in order to assess the worth of the thing compared. It is a 'bench-mark' arrived at after reckoning the best features of the things compared. If an undergraduate, for instance, has the abilities to self-manage the advancement of his learning, to remain at the frontiers of knowledge in his discipline and to present and defend his ideas before general and specialist audiences, he bench-marks the standard of undergraduate education which alone is acceptable for employment anywhere in the world1. Similar benchmarks exist for different qualifications.

Quality is context and need-specific. Rural institutions may require a set of skills which may not be indispensable for urban institutions. Similarly teaching may be considered more important in an undergraduate college and research may take precedence over teaching in a university. Identical bench-marks may not be compatible for rating performers in context diversity. This does not mean that

the degree of excellence in performance in different contexts can be different. For instance, a student of agriculture interested in researching into maize cropping needs a set of skills and competencies which are not the same in the case of a researcher in paddy cropping. Nevertheless the degree of efficiency theymanifest in sustaining and improving the quality of the yield as well as the impact of the outcome cannot differ for purposes of standardising performance for judgement. We often tend to associate quality with Western models and to replicate them in other contexts without critically assessing their suitability to diverse contexts. In the name of quality, for instance, we shut out many—perhaps, equally competent and even better men and women than those who make it to professional and other courses of study—by applying the invariant norm of scores obtained at one final terminal examination.

It is not the fault of the bulk of students who are denied admission that they failed to score against odds—absence of infrastructure, competent learning assistance and counselling—it is only the fault of the system which cannot be justifiably held against them. Such odds do not prevail in developed economies where quality may be judged in the way it is done without possibility of error. The point made here is that bench-marking for quality assessment should take into account context-specific handicaps in developing economies.

The handicaps themselves must be removed before universalizing standards of quality. However, quality shall never be compromised. Quality in higher education is a holistic concept. Thanks to NAAC for the awakening it has brought about among more than a thousand higher institutions of learning in our country which have reset their goals, diversified curricula and improved methods of teaching and learning after the first round of institutional assessments made.

Never perhaps in the history of higher education in the country was there such an extensive revision of curricula, in the best among them, which has resulted in a wide range of core, elective and vocational options now made available to learners. Institutional assessment has worked. It responds to the need for quality assurance while maintaining values of self-assessment and self-governance in higher education. It is increasingly used by many countries for assessing the performance of educational agencies. One of the writers of the U.S. testifies to its effectiveness:

Assessment and evaluation are intended as means to demonstrate institutional effectiveness, foster institutional improvement, and demonstrate accountability.

Nevertheless, as said earlier, quality is holistic. While institutional performance, as an aggregate, points to the effectiveness of overall arrangements and preconditions necessary to promote quality - 'indicators of quality' and does, to some extent, assess performance in order to project an institutional profile, the quality of the performance of components is not generally assessed in depth.

Of course, it is desirable, however, to assess performance in depth. Programme evaluation by learners and peers, assessment of pedagogy by students and experts3 and evaluation of programmes by employers and academics for the impact it has made on society are some strategies which can reinforce institutional assessment and make quality assessment multidimensional and holistic. Organizational constraints notwithstanding, these are desirable.

#### A MODEL OF SUSTAINABLE HIGHER EDUCATION

The foregoing discussion may be found to lead to the following inferences:

- 1. Higher education is more than a process as it is the substance of shaping life.
- 2. Hence education cannot be divorced from the concerns of the milieu.
- 3. Education should sub serve sustainable development in the totality of life in economic, social and cultural spheres.

4. Sustainable development rests upon generational and intergenerational equity and it comprises an altruistic concern for contemporary human resource and natural environment.

5.Sustainable development is context specific and hence it should respond to contemporary global standards in education (in being quality oriented) and to economic, social and cultural needs of developing countries.

#### HIGHER EDUCATION IN INDIA: ACHIEVEMENTS AND FAILURES

During the last fifty years after Independence, higher education has expanded in India somewhat remarkably. The number of universities has increased from a meager 20 at the time of independence (1947) to about 300 in 2002, and the number of colleges increased form less than 500 to more than 13,000 during the same period. There was an explosion in student numbers, the enrolments in higher education swelled from less than a quarter million in 1947-48 to 8.8 million in 2001-2002. Even in case of professional education, there has been "the most spectacular achievement" (Adiseshiah, 1994, p.133). Compared to an almost zero professional education base at the time of Independence, today we have seven technological institutes of high standard, six top level institutions of management, a few world class institutes of medical sciences, besides a large number of engineering colleges, medical colleges, agricultural universities, etc., in addition to a large number of private institutions that have been set up in the recent years. There are also specialised science and technology institutions and industrial research and development laboratories that concentrate on fundamental as well as applied research in the public sector. Public sector institutions also include institutes specializing in social sciences at a higher level. All these institutions could contribute to rapid accumulation of specialised human capital.

Accordingly, India is regarded as having the third largest reservoir of scientific and technical manpower in the world of nations with an estimated stock of about seven million. The out-turnoff scientific and technical personnel from the vast higher education system is of the order of about 250 thousand per annum.

On the whole, today India ranks fairly high in terms of the size of the network of higher education institutions, and enrolment therein. Such an educational explosion has been inevitable as the provision of educational facilities in the pre-Independence period was very insignificant; and Independence has created an unquenched thirst for knowledge resulting in an abnormal rise in social demand for higher education. Secondly, building up a new socio-economic order after the end of colonial rule required large scale manpower with varied skills, and so the government has deliberately expanded the higher education system significantly.

However, it must be noted that despite massive growth in numbers, hardly 8-9 per cent of the 17-23 age group population in the country are presently enrolled in higher education institutions, while the corresponding ratios are above 60 per cent in USA and Canada, more than 40 per cent in several European countries, and more than 20 percent in many developed countries and also in several developing countries. In this context, international evidence must be taken note of. It shows that no country could become an economically advanced country, if the enrolment ratio in higher education is less than 20 per cent. We find no country in the group of the developed countries - whose enrolment ratio in higher education is less than 20 per cent, and conversely we find very few countries with an enrolment ratio of above 20 per cent among the developing countries. The exceptions are very few (some countries in Latin America and Philippines). Thus a level of 20 per cent of enrolment ratio seems to be the threshold level of higher education to contribute to rapid and sustainable economic progress. This evidence refers to early-tomid1990s. More recent evidence may indicate that the threshold level

may be higher. A 20 per cent enrolment ratio in higher education may not necessarily automatically lead to high economic growth, but such a ratio in high quality higher education should necessarily contribute to high economic growth.

The massive expansion of higher education also contributed to the phenomenon of what may be called democratisation of higher education. Presently a large number of students from lower socio-economic strata constitute a sizeable proportion of the total enrolment in higher education. One-third to 40 per cent of the enrolment in higher education belongs to lower socio-economic strata, compared to the extremely elitist system inherited from the colonial rulers. Women students form currently about 40 per cent of the total enrolment. These are no mean achievements for a developing country. The emerging open learning systems, comprising traditional methods of correspondence courses, and also modern methods of distance education also contribute significantly to 'massification' of higher education, though a high degree of inequalities does persist between several states, between various groups of populations, and between several institutions of higher education, besides different kinds of imbalances between different areas of study.

In brief, India has made significant achievements in the development of education: the Indian education system was thrown open after independence to all at all levels-rich, poor, and middle income classes, men and women, rural and urban populations, backward and nonbackward segments of the population. Social and cultural diversity has also become an important strength of Indian higher education. Secondly, as a consequence, there has been a veritable explosion in numbers - student numbers, institutions, and teachers. Thirdly, there has been the development of institutions of excellence, producing highly specialised human capital. Lastly, it could produce the second largest (next only to China) stock of educated and skilled manpower in the world, and the third largest reservoir of scientific and technical manpower.

While the strengths and achievements of higher education are significant, equally, if not more, significant are the problems and weaknesses it is associated with. As already noted, the quantitative expansion is not adequate, as only 8-9 per cent of the youth are enrolled in higher education; inequities among gender and socio-economic groups of population, and between various states are quite marked, especially in certain regions of the country; and the inequalities among different institutions in quality are alarmingly striking.

#### **QUALITY OF HIGHER EDUCATION**

In fact, among many, the most important problem that the higher education system in India confronts is poor and deteriorating quality. Quality of higher education is indeed too difficult to measure in any comprehensive and acceptable manner. One can look at the quality of output, in terms of quality of the graduates universities and colleges produce, the values they acquire, empolyablity of graduates, and earnings associated with their education. The labour market performance of the graduates, generally referred to as the external efficiency of education, and often measured in terms of rates of return, is taken as an important indictor of the quality of the education they have received. It is well documented that both in

India and other developing countries, the rates of return to higher education are sizeable. But they indicate only a partial dimension of the quality of education, and cannot capture many other dimensions, particularly the values the graduates have acquired. What we find in India is: there exists a good number of universities and other institutions of higher education of excellence, at the same time there also exists a large number of institutions of substandard quality. As a result, while in terms of the total quantum of output of our higher education institutions it is one of the largest in the world, the

quantum adjusted for quality, and in case of even indicators of quantity, India does not necessarily rank fairly well with many developed and even developing economies. For example, India has a huge stock of above 7 million science and technology manpower, consisting of scientists and engineers, and ranks third in the world. But the myth of the third largest stock of scientific and technical manpower in the world stands exploded if one carefully examines the quality of the manpower (Tilak, 1997). The stock is not adequate to match the requirements of the economy. Any standardized international comparisons of the stock of science and technology manpower would not make any tall claims tenable. For example, for every one thousand populations, there were only 7 scientists/engineers in India in 1999, while in many other countries the corresponding figure is 10-30 times higher. The stock of manpower is also made of first graduates (in sciences and engineering). Post graduates are few; and doctorates are fewer. This reflects the 'quality of the science and technology manpower India has.

As high as 89 per cent of the enrolments in higher education were made in the first degree (or undergraduate courses) in 2001-02. Students enrolled in postgraduate studies are few (9.3 per cent); and fewer are those enrolled in research (M.Phil and doctoral studies) (0.7 per cent); and 0.9 per cent in diploma and certificate courses. Further, hardly one per cent of the postgraduates who appeared for the qualifying examination in 2000 and 2001 for Junior Research Fellowship was found eligible and only 2-3 per cent of the candidates who appeared for the lectureship eligibility test in 2001 were successful. Further while about 60 thousand students are enrolled in research, the out-turn of doctorates is only of the order of about ten thousand per annum. The research output of our higher education system in terms of quantity and quality, measured in terms of easily measurable indicators, of say number of products, processes, design prototypes developed, or publications and citations, also does not compare very favourably with many other developed and even developing countries. Quality of output of higher education depends, inter alia, upon the quality and quantity of a variety of inputs, such as physical infrastructure and teachers, which can be summed up in the form of financial resources. Hence I wish to briefly discuss the policies and trends with respect to financing of higher education in India and one or two other major policy approaches of the government towards higher education, which have a direct relevance for quality of higher education.

#### **PUBLIC POLICIES**

#### **Funding Higher Education**

Development of education, for that matter, of any sector, critically depends upon the quantum of funds available. Finances also reflect the priority the government accords to education. A cursory look at the trends in the public expenditure on higher education during the last decade reveals a disturbing trend. Public expenditure on higher education began to decline since the beginning of the 1990s. In real prices, the union government's expenditure on higher education declined from Rs. 645 crores (in 1993-94 prices) to Rs. 559 crores in 1996-97. Then there was an increase in the following two years, but the increase could not be sustained. Like the beginning of the 1990s, the beginning of the present decade marks a decline in total expenditure on higher education. Since bulk of the expenditure is incurred by state governments, the total expenditure on higher education in the country as a whole did not decline so steeply. Though state governments had experienced severe fiscal problems, they could not cut the budgets for higher education, essentially because they are non-plan expenditures, or simply the maintenance expenditure. But of course there was no significant increase either. Cut in the union government's expenditure does mean cut in plan allocations for higher education that have a direct bearing on quality. It is interesting to note that this is the period during which it is being repeatedly stated that the quality of higher education has to be improved to produce globally

competitive graduates. Perhaps another faulty assumption made is: quality of higher education can be improved without substantially increasing resources.

In terms of relative priorities as well, higher education suffered severely. The share of higher education in the national income indicates the relative priority the government gives to higher education. Available statistics show that the importance given to higher education has declined steeply, with the share of higher education in GNP falling from 0.46 percent in 1990-91 to 0.35 percent in 1997-98. It's only in the later years, some increase in the ratio can be noted. But again the increase does not seem to last. According to the budget estimates, the corresponding proportion falls to a level below that of 1990-91 i.e., to 0.4 per cent. Note that India was spending about one per cent of her GNP on higher education at the beginning of the 1980s. Many advanced countries seem to spend much higher proportions of their GNP on higher education.

The share of higher education in the total government expenditure may tell us more clearly about the priority that the government gives to higher education, as the government has more direct control on its own expenditure than on the national income as a whole. But this has also experienced a similar trend. As a per cent proportion of total government expenditure, the share of higher education declined from 1.6 per cent in 1990-91 to 1.3 per cent in 1996-97; it has increased in the later years, but again declined to 1.3 per cent in 2002-03 (budget estimates), i.e., to less than the 1990-91 level. In short, currently India is spending on higher education, in both absolute and relative terms, less than what she was spending about 12 years ago!. More strikingly, allocations to higher education in the eighth and the ninth five year plans reached the all-time low. Though plan expenditures in education are generally small compared to huge non-plan expenditures, since they set directions for future development having a significant bearing on quality, allocations in the Five Year Plans assume much importance. Hardly 0.3 per cent of the total Five Year Plan expenditure in the eighth Five Year Plan was devoted to higher education, compared to 1.2 per cent in the Fourth Five Year Plan. Interestingly, contrary to general beliefs, the decline in allocations to higher education has not necessarily benefited elementary or secondary levels of education in terms of increased allocations.

The entirely disturbing financial squeeze gets reflected in the physical infrastructure of our higher education institutions. It is common knowledge that many colleges, and even universities suffer from severe inadequacy of physical resources such as buildings, classrooms, libraries, etc., not to speak of high-tech modern equipment, as one frequently notices higher education institutions being run in poor quality buildings with inadequate libraries and laboratories, classrooms often without power, no sufficient playgrounds, etc. One notices that the situation is far from satisfactory in many universities, including in some of the best universities, whether central or state. The situation is worse in affiliated colleges, where 90 per cent of the undergraduate students and 34 per cent of the post graduate students study. While this is most likely the correct diagnosis of the situation, no systematic evidence is available on these and related aspects. In fact, there has been no proper attempt to make a detailed survey of the physical infrastructure and of even teachers available in higher education institutions, of the kind made in school education (by the National Council of Educational Research and Training through its All India Educational Surveys). It would be useful to have such a survey once in a while, if not at regular intervals. Such a survey would be extremely useful to examine the quantum and quality of physical inputs that go into higher education. This may serve as an eye-opener to many to the ground realities, and may also help in better planning. Financial stringency also affected the quality of teachers and their recruitment. There were in all 4.3 lakh teachers in higher education institutions in 2001-02. Again even though detailed information is not available, it is widely felt that only a small proportion of them hold doctorate degrees. In this context, it is also necessary to note that it is only recently,

particularly after the National Policy on Education 1986 was formulated, some important efforts have been initiated for the improvement of quality of teachers. A number of academic staff colleges were established to improve the quality of higher education through orientation and reorientation of college teachers on a regular basis. There are presently 51 such colleges. In addition, quite a few university departments also organise refresher courses to college teachers. While speaking about teachers, we may note that occasionally the University Grants Commission and other bodies and committees refer to small pupil-teacher ratios, and the need to rationalize them. But pupilteacher ratio, a common indicator of quality of teacher inputs in school education, may not be a relevant indicator of quality in higher education either; nor can it be used in teacher planning. There is also no justification for non-filling up of hundreds of vacant teacher positions in the universities and colleges, a measure that is adopted to save financial resources and also to avoid problems of management of teachers. Certainly such an approach does not lead to sustainable quality higher education.

A very drastic decline in public expenditure on higher education can be noted, when we examine the trends in per student expenditure. In 1993-94 prices, expenditure on higher education per student declined from Rs.7676 in 1990-91 to Rs.6149 in 2002-03 (budget estimates), a decline by nearly 20 per cent points in the index. Decline in per student expenditure means decline in real resources available per student on average, seriously affecting the quality of higher education. After all, there were steep cuts in budget allocations, for libraries, scholarships, faculty improvement programmes, etc. As a consequence, serious effects on the quality of higher education are already widely felt.

More importantly one can also notice a decline in the public expenditure on inputs that are directly related to quality, such as research. The central government's plan expenditure on research has come down from a low level of Rs.5.35 crores in 1989-90 to 4.6 crores in 1994-95. In real terms, it declined by 11 per cent every year. Non-plan expenditure on research also declined in real terms. This is in case of research in general education. Research in technical education suffered more severely: even in current prices, the plan expenditure declined by 60 per cent and non – plan expenditure by 82 per cent. Obviously the decline in real prices is higher. Quite interestingly such data are not available for the later years! However, some other relevant piece—meal statistics is available from the UGC. According to the latest available statistics from the UGC, research fellowships awarded by the UGC amount to a petty. 1.8 per cent of the total non-plan grants of the UGC in 2002 - 03, compared to 5.7 per cent in 1995 - 96. Government's budgetary allocations for scholarships, a crude measure of equity and also excellence, declined quite steeply during the 1990s; as a proportion of the total expenditure on higher education, it declined from 0.6 per cent in 1990-91 to 0.23 per cent in 2001-02 (UGC, 2003). In 1990-91 the UGC grants for 'quality improvement in education and research' amounted to 76 per cent of the total plan grants of the UGC. The same budget head does not appear in the budgets of the later years. But if 'promotion of excellence and quality' is the substitute for it, it received only 25 per cent of the plan grants in 2001 - 02! In 1995 - 96 another substitute term was used: grants for 'promotion of excellence and research' and the grants made for this purpose worked out to be only 14 per cent. Grants for quality improvement and research programmes such as College Science Improvement Programme (COSIP) and College Humanities and Social Science Improvement Programme (COHSSIP) have flown quite erratically in the recent years, making sharp ups and downs. Both together accounted for Rs.1.93 crores in 1999-2000, which declined to Rs.1.14 crores in 2000-01 in current prices. In 2000-01, 2003 'major' and 'minor' research projects were approved, and the total grants (including for the on-going projects) were of the order of Rs.25.4 crores; in the following year, the number and the grants both declined: the number of projects approved were only 1609, and the grants released were Rs.17.6 crores. The total number of minor research projects was 1737 in 1998-99, which declined to 1184 in

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2001-02. During the corresponding period, the number of major research projects declined from 447 to 425. The overall shift in allocation of resources away from research activities could be largely attributed to the myopic conception that research is not necessary for improvement in the quality of higher education or that research is not an important part of higher education or that it is not important for national development either. It may be remembered that traditionally universities are homes of research and that research and training mutually strengthen each other, besides contributing to national development in several ways. The sum up, higher education institutions are being treated as if they are a part of a non-essential sector with the attendant vulnerability to the vagaries of fluctuations in public spending. This has to change and higher education needs sustained funding from the public exchequer.

Though finances do not solve all problems, they are absolutely necessary for any improvement, even for the maintenance of the system. It can be said that though finances are not a sufficient condition for development, they form a crucially necessary condition for the development of higher education. Inadequate funding certainly would seriously affect the quality of higher education. The budgetary squeezes compel the universities to spend considerable time and energies of the faculty and the heads of the institutions not on improvement of the quality of research and teaching, but more on mobilization of financial resources. As a result, mobilization of resources and reduction in costs are becoming important, if not the sole objectives of university management, More than academic management of the institutions, of late, financial management has become an important concern of many institutions of higher education in India. Accordingly, institutional heads are chosen not necessarily with high academic credentials, but more based on their proven ability in financial management. Because of such policies, even some of our institutions of higher education known for excellence are in peril (Indiresan and Nigam, 1993).

#### **CONCLUSION:**

This short survey of the current activities of some HEIs across 12 OECD member countries shows that universities have made progress on sustainable development, particularly environmental aspects, in spite of the lack of a national legislative framework. However, as noted in the introduction, experience within the UK teaches that even the most committed institution will find it difficult to progress without external factors and policy being addressed. Despite the varied examples and activity, HEIs focused mainly on environmental aspects and had limited activity in social or economic aspects of sustainable development. Adherence to sustainable development objectives and principles is both an opportunity and challenge. It is an opportunity to transform institutional practices and activities, but a challenge in making comprehensive changes. To fully realise sustainable development, it is important to recall that the three pillars work in conjunction with one another to produce balance and stability. And as noticeable from this exercise, most HEIs have not yet attained this kind of sustainability. Formulating and executing a visioning statement plus a framework fully recognises the complementary and integrated nature of sustainable development. It is clear from this research that these procedures are needed to make real progress.

The study showed that there is a need to institutionally integrate sustainable development into all the different functions of an HEI and to make an institutional commitment through a sustainability agenda. Although HEIs are incorporating sustainability into some of their activities, there remain some challenges to comprehensive adoption and to move from the incremental to the transformational. The discussion of barriers and corresponding policy recommendations went some way to suggesting ways to make the uptake of sustainable development more widespread and prominent across the countries.

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Again, the barriers cited by the participants had much in common and it would be worth exploring the value of building networks between countries to support each other in making change happen. This would be particularly useful in common economic areas such as the EU where joint approaches to HE are already underway.

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