

Internationalization and Cooperation in Higher Education

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“ In the beginning, there were two nations. One was a vast, mighty and magnificent empire, brilliantly organized and culturally unified, which dominated a massive swath of the earth.

The other was as undeveloped, semi-feudal realm, riven by religious factionalism and barely able to feed its illiterate, diseased and stinking masses.

The first nation was India.

The second was England.”

The year was 1577.

**—quoted by Alex von Tunzelmann in Indian Summer, Page 13
from Wolport, A new History of India, Page 128**

1. Historical Perspective: Indian context

i) Ancient Period: 500 B.C.–8th century

a) Vedic: Gurukul system: No evidence of any mobility

b) Buddhist: Taxila: Babylon, Persia, Tibet, China

Nalanda: Persia, Tibet, China, Korea, Japan, Indonesia, Turkey

Vikramshila: Huan Tsang – 5 years

I-Tsing – 10 years

Emphasis: Religion and Knowledge

ii) Medieval and Pre-British Period: 8th–18th century

- Education based on Education system from Arab and Persia introduced
- Madarsas center for Higher Education/Maktabs for primary education
- Emphasis on Religion, Knowledge, Materialistic gain – Science, Astronomy, Maths and Medicine
- Active reliance on Arabic and Persian texts from Arab, Iran and also from University of Cordoba, Toledo, Salamanaca from Moore rulers in Spain
- Special mention of texts written by Al Biruni, Ibn Sina, Al Kharizmi and others are available
- Al Biruni, Ibn Sina spent considerable time in India ranging from 5 to 10 years during 9th and 11th century
- Astronomical observations in Jaipur, Delhi and Ujjain
- Entry of Portuguese, French and Dutch system of education in India
- Establishment of Educational Institutions in Pondicherry, Goa and other parts of South India
- No evidence of collaboration from Portuguese, French or Dutch Universities in these institutions

iii) British Period: 1800–1947

- Establishment of many institutions of Higher Education: Universities in Lahore, Calcutta, Chennai and Bombay; and later institutions like DU, BHU, AMU, Lucknow University, Allahabad University and many others throughout India
- Emphasis on producing workforce only to rule India
- Some emphasis on Science in later part: establishment of Tata Institute of Science in private sector which later became IISc., the top institution in today's India
- Individual achievements and cooperation at International level by persons like Bose, Saha, Bhabha, Salam, P. C. Roy, Tagore and many others from Indian Universities
- No institutional attempts for International cooperation except that some universities were manned by Professors and scientists from British, American and French Universities

iv) Post Independence: Early Period

- Serious efforts were made in the field of Internationalization and cooperation started during this period
- Establishment of Academic Institutions based on International Cooperation– IIT's in Kharagpur, Kanpur, Bombay, Chennai, Delhi
- Establishment of Industrial Complexes – Heavy industries, Bhilai, Durgapur, Rourkela, etc.
- Starting many bilateral, regional and multilateral exchange programs with many countries and international organizations to be discussed later in the presentation.
- The main characteristic of these efforts of Internationalization and cooperation was that they were mostly one directional

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v) Internationalization and Cooperation in Present era

The concept of Internationalization and cooperation has taken new dimensions in the present era of globalization of knowledge economy in the field of Science and Technology. Let us look into some detail in the context of Indian Higher Education.

2. Challenges of Contemporary Higher Education and relevance of Internationalization

- Provide Access, Inclusion, Equity and equal opportunities to all sections of society
- Acquire and maintain minimum standards of Global recognition and acceptance
- Make efforts to achieve quality and Excellence to be competitive at International level
- Provide adequate infrastructure for Teaching and Research in various disciplines of STEAMM
- Create pool of highly qualified human resources of faculty, scientists and technical manpower
- Create skilled, trained and competent workforce of scientific and technical personnel to fulfill the demands of expanding knowledge economy and Industrial development of our country

Our efforts towards Internationalization and Cooperation should be synchronized with achieving these goals.

3. Concept, Parameters, Indicators and Inhibitors of Internationalization in India

i Definition

UNESCO/International Association of Universities (IAU)

“Internationalization of higher education is defined as the process of integrating an international, intercultural and/or global dimension into the goals, functions (leading/learning, research services) and delivery of higher education”.

G-20 (2012) Washington D.C.

“ Global mobility in higher education- the exchange of students and scholars - is an economic engine that fuels the economy of both home and host countries, keeps our universities vibrant and competitive, and prepares the future workforce to meet global challenges. International education is a major service sector “ export” which boosts skill development At the same time it fosters innovation and growth and strengthens commercial, cultural and diplomatic ties between nations”.

ii Parameters

	Inward	Outward
Student Mobility AISHE (2014) Projected 15% of GER \simeq 3.4%	30,000 9,00,000	222,000 ??
Faculty Mobility	almost negligible (through Government sponsored exchange programs)	almost none
Program Mobility	None Some Twining Programs with Private Universities	None
Institutional Mobility	None UGC regulations	Almost none BITS/AMITY
Partnership and Collaboration	Some efforts	Considerable efforts

Our national score (except the last) on all the parameters of Internationalization is very poor. Present Policies of Government on Higher Education are not conducive to Internationalization in any of the above parameters.

- Reflects in the global ranking of our institutions where one of the major criterion is based on these parameters like
 - ✦ International student ratio
 - ✦ International Faculty ratio
 - ✦ International outlook

- In every document released by Government like IOE, World Class Universities or DNEP, the emphasis is given on Internationalization and cooperation. It needs Rethinking at the level of Framing Policies in Higher Education.

iii **Indicators of Internationalization**

- Improvement in overall Quality of Education
- Improvement in Ranking of Institutions
- International Awards to Faculties, Institutions, Organizations
- Demand from International Students
- Response to our recruitment efforts from the International Faculty and scientists

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iv **Inhibitors to Internationalization**

- Lack of course and credit equivalence with foreign Universities
- Lack of Clear Policy of degree equivalence between Indian and Foreign Institutions
- Lack of efforts in Marketing and Branding India in Higher Education
- Hindrances due to Policies in Higher Education regarding admission of students, recruitment of Faculty, Financial support and logistics
- Lack of adequate Infrastructure of International Standards in our HEI
- Inadequate level of Quality and Excellence in Academic Institution

4. Importance and Impact of Internationalization

(i) Educational

- Indian presentation in G-20 (2012).
“India finds the Internationalization of higher education to be an opportunity to upgrade the quality of human resource and to improve the standards of teaching and research in Indian Universities.”
- Enhancing the quality of education
- Improving the quality and quantity of research
- Enhancing the prestige and ranking of universities and other HEI at international level
- Evident from the success of our programs in Nuclear Research and Space Research which started with international cooperation and later became independent

In summary, the educational impact is the most obvious and visible impact of Internationalization and has been emphasized many times in

- ✦ National Knowledge Commission Report 1986, 1992
- ✦ World Universities Proposals of MHRD
- ✦ IOE Proposals of MHRD
- ✦ DNEP

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(ii) **Economic**

- G-20 paper by International Institute of Education
“ Global mobility in Higher Education - the exchange of students and scholars is an economic engine that fuels the economy of both home and host countries.”
- G-20 accepts that the international education is a multi billion dollar industry
- GATS recognizes higher education as a service industry that can be traded across countries

- Countries like Australia, England, New Zealand depend quite heavily on higher education towards boosting their economy treating it as an industry to generate revenue. For example

Countries	Annual revenue in billions
U.S.	\$ 268
Australia	\$ 19.1
New Zealand	\$ 2.3
Canada	\$ 5.5
Ireland	\$ 0.9
India	No estimates available (but perhaps it is negative)

Economic benefits through skill development by

- ✦ International Internship
- ✦ Boost to “Make in India” Program
- ✦ Make the technical personnel more employable at national/international level
- ✦ Encourage entrepreneurship
- ✦ DAVOS, G-20, G-7 are glaring examples where the economic impact of Internationalization is most visible.

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(iii) Cultural

The cultural impact can not be quantified but it is visible in many countries through their Internationalization program. The participants in such programs become brand Ambassadors in fields of Arts, Science, humanities for that country. Prominent countries like US, Germany, Russia and present day China, are very actively pursuing policies of using Internationalization of Higher Education for spread of their cultural activities.

(iv) **Political**

Internationalization of Higher Education has been very effectively used like the Internationalization of sports to ease the Political tensions between countries. The mutual exchange visits of scholars in areas of philosophy, religion, culture, language and even science has helped towards bringing reapproachment in many case. Some examples:

- The role of International conference in basic sciences to ease cold war relations between US and Soviet Union in 1960's
- Fulbright fellowship scheme of US to propagate US sensibilities to other nations
- Rhodes fellowship of UK to spread message of cooperation

- ★ Bilateral Exchange between many countries to propagate the message of peace and friendship
- ★ “100 Thousand Strong Programs” of US students to China
- ★ US Brazil Education partnership
- ★ ‘Global Education’ program of Russia
- ★ US Japan exchange program
- ★ Singh-Obama Fellowship
- ★ Bhabha-Newton Fellowship
- ★ To quote from ‘Study in India’ Program as one of its aims
 - “Improve Soft Power of India and use it as a tool in diplomacy”
 - This is also emphasized in the G-20 paper mentioned earlier.

5. Concerns and Risks in National Context

- Negative impact on domestic and GER. The projected 15% foreign students as intake in supernumerary seats would put pressure on the infrastructure and human resource which is already insufficient for our HE
- Commercial interests of Foreign Education Providers would displace the academic interests
- Maintenances of quality of education from Foreign Education Providers in India: Strict norms for entering the HE sector in India through
- Possible Erosion of Indian Values and Culture due to opening the Education sector to Foreign Institutions
- Maintain healthy and fair competition between India and Foreign HEI, in case of Government as well as private HEI in India
- Formulate strict norms for HEI participations in case of both the national and international Institutions and transparent implementation of these norms

6. Present Initiatives by GOI and Industries

Various organisations in Government as well as private sector have initiated programs of Internationalization and cooperation in Higher Education and Industrial Development.

A. Government Organizations

i UGC

Conferences and meetings organised on

- ✘ Promotion of Indian Higher Education Abroad (PIHEAD)(2004)
 - ✘ Modalities to provide Education opportunities to Foreign students and generate resources (2006)
 - ✘ Consortium for International Education (2009)
- (No decisions were taken on the recommendation)

ii NUEPA

Conferences organised on

- ★ Internationalization of Higher Education (2004)
- ★ National Consultation on Foreign providers in Indian Higher Education (2009)
- ★ Recommendations were never followed up

iii **AIU**

Conferences organised on

- ✘ Mysore Conference on Internationalization(2009)
- ✘ Amritsar Conference on Internationalization(2002)
- ✘ AIU Task Force on Internationalization(2004)
- ✘ Pune Conference on Internationalization(2015)

Note: Some of the Specific Recommendations made by the above organisations are included in DNEP by MHRD to be discussed later.

(iv) **MHRD**

- Ministry level Bilateral Programs in STEAMM with many countries (see website).
- Bill on Foreign Providers of Higher Education 2007 and 2012
- Bill on the world class Universities 2012
- Global Initiative in Academic Networks (GIAN) 2016
- Visiting Advanced Joint Research Faculty Scheme (VAJRA) (2019)
- Connect to India (2016)
- I. O. E. (2019) strict norms and well defined time bound goals for Internationalization
- Study in India (2019)
- Skill India (2018)
- DNEP (2019)

(v) **DST**

- Bilateral agreements with 83 countries out of which 44 agreements are very actively implemented. Some examples:
- Indo-US S and T FORUM (IUSSTF)
- Indo-German S and T centre (IGSTC)
- Indo French Countries for promotion of Advance Research(ICFPAR)
- India-Africa S&T initiative
- UKIERI
- Details of all the bilateral programs are available on the website of DST

Activities Mostly centered on Research and Development like

- R&D Projected
- Training of Students and Faculty
- Participation in Mega Science Projects
- Access to Advance Facilities
- Exchange visits/ Fellowships/ Internships
- Multi institution Centers
- Creation of joint Ventures
- Academic-Industry Collaborations

Multi lateral Regional Cooperation

EU

ASEAN EAS (East Asia summit)

BRICS IBSA (India-Brazil-SA)

SAARC NAMSTC (NAM)

BIMSTEC ICIMOD (Mountain Devepment)

ASEM HIMAP

IPPC IOR-ERC (India OCEAN Run association regional Cooperation)

UN based organisations

- UNESCO-TWAS-ICTP
- UNESCO-UNCSTD
- OECD organasition for economic Cooperation and Devlepmnt

Policy Level Cooperation

Carnegie Group: S& T Ministers & Science Advisor
 GSO-GRI Group of senior officers

Mega Science Projects

- India-CERN LHC Multinational
- FAIR Germany
- TMT U.S.
- LIGO Multinational
- India-Fermi Lab U.S.
- Molecular Crystallography Project Italy.

vi **SERB Ministry of Science and Technology**

- ★ PIRE NSF (U.S.)
- ★ India-US grand Challenge NIH (U.S.)
- ★ VAJRA
- ★ GROWTH (Global Relay of Observation Watching Transients Happen)
- ★ TOKOMAC FUSION ENERGY

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vii **DBT**

- ✠ Indo-UK Cancer Reseach
- ✠ DBT-Finland
- ✠ India- Sweden, Denmark, Canada, Brazil, US, Spain, Cuba, SA.
- ✠ Indo-US NIH, NIAID, NEI, NCI

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viii **ICMR**

- ★ MOU's for bilateral Research Projects
- ★ Fellowships

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viii ICMR

- ★ MOU's for bilateral Research Projects
- ★ Fellowships

ix ICAR

- ✠ Joint Research Projects
- ✠ Fellowships

x **ICSSR**

- ✠ Exchange visits with many Countries
- ✠ Fellowships

xi **ICPR**

- ★ Exchange visits with many Countries
- ★ Fellowships

xii **ICHR**

- ✠ Exchange visits with many Countries
- ✠ Fellowships

xiii **AICTE**

- ★ Exchange visits
- ★ fellowships

xiv **EdCIL**

Only organisation for bringing students to Indian Universities(Advertisement, Logistics, VISA, Fees, Accommodation)

7. Challenges and Future Prospects

- i* Provide Infra structural facilities of International standards i.e. Hostel, Labs, Class rooms, Health center
- ii* Provide Quality Education to International students
- iii* Make policy decision for opening International campuses of Indian Institution like IIT, IIM, AIMS specially in Developing and neighboring countries
- iv* Make Policy decision for inviting Foreign education provides in India
- v* Take special initiative to attract international students. To start with from neighboring countries from South Asia, East Asia, West Asia and Africa
- vi* Formulate Norms for selecting participating National and International institutions

8. *Internationalization in DNEP*

- i* NHEQF(National Higher Education Qualification Framework) to take steps to provide course compatibility with International standards.
- ii* Emphasis on course in Indian Languages, arts, culture, history and traditions to attract PIO/OCR and international students in Indian and International HEI
- iii* Encourage Institutional collaboration
- iv* Facilitating entry of International students and Researcher:
 - RSA to formulate a “study in India” program
 - NRF to formulate Research and Developments
- v* 15% supernumerary seats in all the identifies HEI for International collaboration
- vi* special focus on
 - ✘ Students Mobility and Exchange
 - ✘ Faculty mobility

Internationalization in DNEP (contd.)

- vii* Research collaboration through IUCIE
- viii* Establishment of IUCIE(Inter University Center for International Education)
- ix* Offshore campus to be allowed for selected HEI
- x* MOOCs and ODI accessible to Foreign countries
- xi* Allow Foreign Universities from Top 200 in International ranking to open campus in India
- xii* Special effects for outreach and branding of Indian Higher Education

9. Conclusion

The aspect of Internationalization and cooperation promises great contribution towards attaining excellence in Teaching and Research, Knowledge creation and its dissemination, Economic gain, spreading Indian culture abroad and providing Political and diplomatic advantage

Efforts should be made by the Government and industry to take necessary steps to make its functional at the level of

- ✦ Students
- ✦ Faculties
- ✦ Scientists and Engineers
- ✦ Institution of higher education and Research
- ✦ Industry

It requires a paradigm shift in our policy of Higher Education

DNEP promises to achieve a lot and let us hope the recommendations made in DNEP on Internationalization of Higher Education are implemented

