Together for Impact
A decade of UK-India partnership in research and innovation

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Report prepared for UK Research and Innovation India by Education Insight, Global Impact Institute and Universities UK.

This report is released in the same month as UK Research and Innovation (UKRI) comes into being. UKRI brings together the seven Research Councils, Innovate UK and Research England to:

- Push the frontiers of human knowledge and understanding;
- Deliver economic impact and increase social prosperity and;
- Create social and cultural impact.

To achieve this the organisation must enable engagement with excellence around the world. UK Research and Innovation is starting from a position of strength. Having international teams in Beijing, New Delhi and Washington DC for the last 10 years has transformed the UK’s relationship with three of the world’s largest and most dynamic hubs for research and innovation. The UK Research Office and Innovate UK Brussels office also provide a valuable mechanism in facilitating and deepening UK research and innovation partnerships with European partners.

RCUK India, now becoming UKRI India, was established in 2008 to help realise the ambition of both countries to increase the amount of joint research conducted by the UK and India. This report is intended to illustrate the impact that the office has had over the last decade. The content is based on a review of secondary data and a comprehensive review of primary data obtained through a survey of participants from both countries in funded projects. The survey sought to assess the impact of these bilateral activities on the individual participants, their institutions, and their research field as well as identify any wider societal benefits. Because these are projects supported by RCUK prior to creation of UKRI the results do not fully represent impact from Innovate UK projects for business-led innovation.

Research collaboration between the UK and India has nearly tripled since 2007 by co-authorship. The UK has advanced from India’s fourth largest international collaborator to its second globally and its first in Europe. The average field-weighted citation impact (FWCI) of joint research over this period has been higher overall than the national average for both countries and has increased by two thirds over the last decade.

This has taken place within a global context of greater expenditure on research and an increase of annual publications. Scholarly output for both the UK and India has increased in absolute values as has India’s proportion of the global share. Investment in research and development as a proportion of GDP has been relatively flat in both countries since 2008, though there have been some increases in real terms. This is particularly true in India where the economy has grown by over seventy five percent. Both country’s Governments recognise the importance of research and innovation in achieving sustainable economic growth and long term societal well-being and have stated their commitment to increasing the amount that is spent on research in relative and absolute terms.
The India office was established in 2008 to develop positive, sustainable, and influential relationships with key stakeholders; support the facilitation of high quality bilateral research collaboration and build the profile of the Research Councils to influence and deliver valuable high impact outputs. During its operation, the office has overseen the growth of the bilateral portfolio from £1,000,000 to over £300,000,000. This comprises over 200 individual projects, involving over 175 different UK and Indian research institutions and more than 100 individual partners.

To deliver its work, the team have built relationships with key stakeholders across the Indian research landscape including Department of Atomic Energy, the Department of Biotechnology, the Department of Science and Technology, the Indian Council of Historical Research, the Indian Council of Medical Research, Indian Council of Social Science Research, the Ministry of Earth Sciences, and National Institute of Urban Affairs. These bodies have worked with the UK research councils to deliver activities in areas as diverse as energy, food security, manufacturing and social change.

The breadth of the Research Councils’ India activity has grown both in terms of the range of partners engaged as well as the amount of funding distributed, and shown commitment to key global responsibilities in a world where challenges cross national boundaries. The India office plays a central role in the Councils’ delivery of UK Government initiatives like the Global Challenges Research Fund and the bilateral Newton-Bhabha Fund. These programmes are funded through the UK Government’s Overseas Development Assistance (ODA) budget. They have and continue to support valuable research between the two countries that could help to address shared global challenges. This funding has been instrumental in building the UK-India research landscape. In future, the shared priorities such as data science suggest a complementary role for other sources of funding to ensure that the full potential of the collaborative research relationship between the UK and India is realised.

Over the past ten years, the India office has overseen demonstrable progress against all of its objectives. As UKRI India it has an opportunity to ensure that the bilateral relationship in 2028 is as strong as the indicators suggest that it can be. India is expected to be the third largest economy in the world and research and innovation expenditure in both countries is expected to increase. Over half of all UK scholarly output is currently produced with an international partner and if trends continue, this proportion will increase further. It is likely that the UK’s share of total research produced may fall but this does not necessitate a fall in quality. UKRI India has a crucial role to play in supporting and growing the international networks that are necessary to ensure that UK academics continue to have access to excellence, whether that be in terms of facilities, people or ideas and so are able to maintain the UK’s position as a leading research and innovation nation in an increasingly competitive global environment.

The ten years of the office in India’s operation have seen the creation of a successful international partnership. Now, UKRI has an opportunity to expand this further and support academics in both countries and beyond to deliver high-impact research and innovation that helps to address current and future global challenges.

**Key findings**

The survey of project participants established a very high impact on the participating UK and Indian researchers and their institutions. In addition to addressing global and national challenges, these projects are also perceived to have brought considerable benefits to their immediate region.

**Impact on human knowledge**

The research funding has resulted in an impressive volume of research output. Half of the Indian researchers and over a quarter of the UK researchers produced more than five research papers attributed directly to the UK-India grant. Overall, over three-quarters of the Indian and two-thirds of the UK researchers produced more than two research papers. Almost 90% said the impact on their partnership was very high or high.
Impact on economy, society and culture

Nearly three-quarters of the respondents (73.1 per cent) identified the local communities as the key beneficiary. More than half (59.1 per cent) agreed or strongly agreed the research funding had a national level impact on the two countries and over half attributed a global-level impact to the UK-India partnership.

Most of the researchers (68.8 per cent) evaluated the overall impact of the UK-India funding to be high or very high. The area which was impacted most was the broader society (e.g. local farming communities; NGOs and other stakeholders) followed by policy impact and business-led innovation scored lower, reflecting past grants’ focus on more fundamental research.

Impact on individuals

The UK-India coordinated funding had a significant personal impact on the research activities and the career of the respective respondents. High or very high positive impact on one’s research was attributed to 80.3 per cent of the UK and 84.4 per cent of Indian respondents. The Indian researchers perceived participation to have important benefits for their careers: 59.4 per cent stated high or very high impact.
The survey established that the most significant benefit of the funding for the researchers was expanded network of international collaborators (72.1 per cent and 87.5 per cent of the researchers from the UK and India respectively) followed by researchers' enhanced reputation as experts in their field (70.5 per cent for the UK and 84.4 per cent for the Indian researchers).

**Impact on institutions**

Participation appears to have supported wider institutional development and capacity building in India and the UK. The most significant identified benefits for the researchers' home institution were the support received for academic mobility and exchanges (as identified by 68.9 per cent of the UK and 74.2 per cent of the Indian researchers), followed by support for early career researchers (stated by 67.2 per cent of the UK and 51.6 per cent of Indian researchers).

**Looking forward**

Capacity building is a compelling common theme highlighted by both the UK and Indian researchers. There is a strong will that more student and researcher exchanges, reciprocal visits and short-term visits take place in future. Indian researchers had a strong focus on opportunities for early career researchers.

Both the UK and Indian researchers were enthusiastic about the future research engagement between the two countries over the next ten years. There is an expectation of an increased and strengthened research and innovation partnership built through continuous collaboration.