

## INDIA

India's diverse economy includes traditional village farming, modern agriculture, handicrafts, a wide range of modern industries and a multitude of services. Slightly more than half of the workforce is employed in agriculture, but the services sector is the major source of economic growth, accounting for more than half of India's GDP. India's GDP grew on average by 7% a year in the decade to 2007, then eased in 2008 and slowed further to 5.6% in 2009. GDP per capita (in PPP terms) of USD 2 790 in 2008 was equivalent to just 6% of GDP in the United States. However, India is fast developing into a major global economy. Innovation can make a valuable contribution to India's long-term challenges: building physical and social infrastructure, creating employment opportunities and improving basic and higher education.

India's gross expenditure on R&D (GERD) was 0.7% of GDP in 2004, less than that of Brazil, China, Russia and South Africa. The government intends to increase this level to 2% over the coming years. While both public R&D and business R&D are low by international standards, growth rates have been strong over recent years. Business expenditure on R&D (BERD) was 0.14% of GDP in 2004, also below the BRICS and OECD averages.

India's triadic patents almost doubled over the last 20 years, with average growth of 20% since 2000. India is also developing patents in areas such as pollution abatement and waste management, and its shares in Patent Cooperation Treaty (PCT) patent applications are similar to those of Hungary, Poland and Russia. However, India's 0.14 triadic patents per million population in 2008 and 35 scientific articles

per million population ranked last among the countries studied.

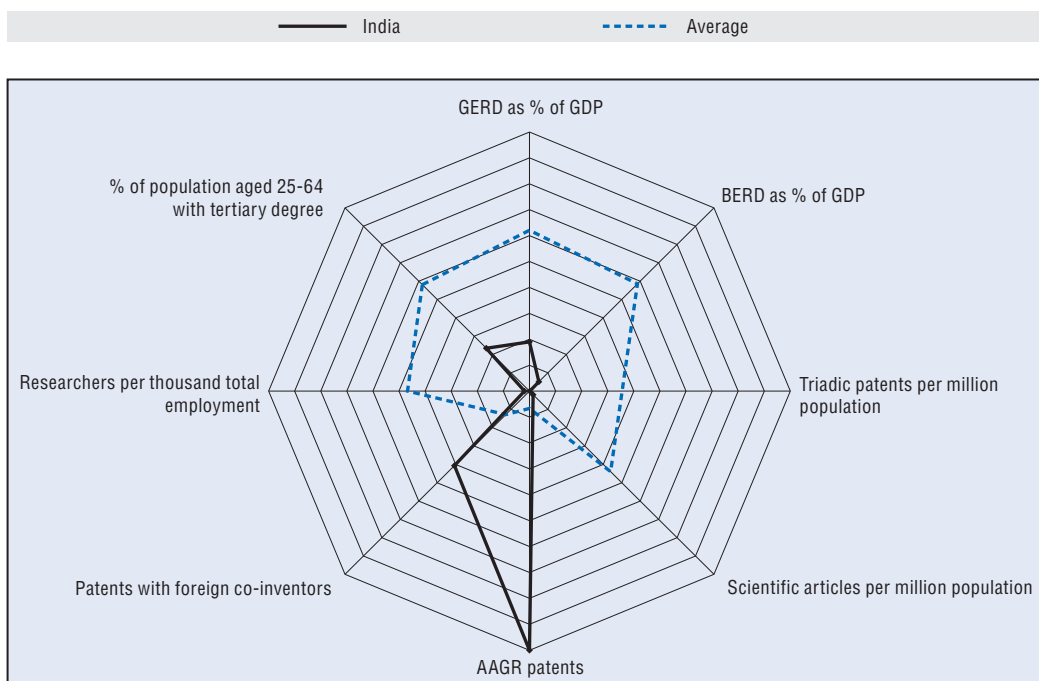
There is enormous potential to improve innovation linkages. India has already capitalised on its large educated population to become a major exporter of computer and information services. Its 25% of PCT patent applications with foreign co-inventors during 2005-07 is above the average. India's share of patents co-invented with the United States is at least twice as high as the share co-invented with European Union countries.

India's performance in human resources in science and technology (HRST) has significant development potential. There is less than one researcher per thousand employment and only 11.4% of the population aged 25-64 have a tertiary degree, a smaller share than in other non-OECD economies.

India has not yet formulated a national innovation policy, but in the framework of ministries and departments various sectors have articulated and budgeted for three main innovation policy challenges: enhancing innovation potential in new technologies; building technological capabilities and competitiveness in the manufacturing sector; and reconfiguring the formal and informal sectors.

Recent developments in India include the establishment of the National Science and Technology Nano Mission and the National Council for Skills Development which will focus on modernising training institutes. The 2009-10 budget also allocated funding to several programmes to boost innovation in order to meet the needs of economically weaker sections of society more efficiently.

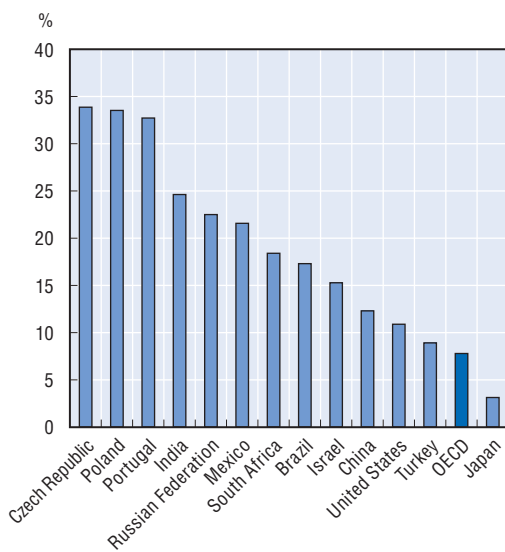
### Science and innovation profile of India



StatLink <http://dx.doi.org/10.1787/888932333975>

### Patent applications with co-inventor located abroad

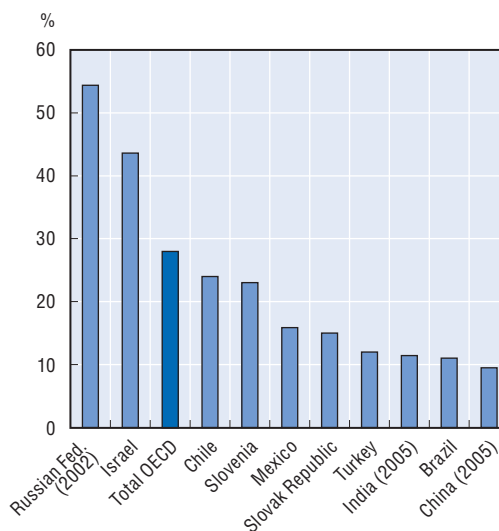
Percentage of all patent applications, 2005-07



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### Educational attainment

Percentage of population aged 25-64 with a tertiary degree, 2008



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