

Table 20.6: South Africa's bilateral scientific co-operation in Africa, 2015

Joint co-operation agreement (signed)	Human development	Intellectual property	STI policy	Biosciences	Biotechnology	Agriculture /Agro-processing	Space	Laser technology	Nuclear medical technology	Water management	Mining / Geology	Energy	ICTs	Mathematics	Environment and climatechange	Indigenous knowledge	Aeronautics	Material sciences and nanotechnology	Basic sciences	Human and social sciences
Algeria (1998)								●	●								●	●		
Angola (2008)	●																			
Botswana (2005)*					●	●	●			●	●	●	●			●				
Egypt (1997)							●	●										●		●
Ethiopia (2014)																				
Ghana (2012)*					●		●						●							
Kenya (2004)*						●	●						●							
Lesotho (2005)						●														
Malawi (2007)	●		●	●				●								●				
Mali (2006)																				
Mozambique (2006)*	●					●	●						●							
Namibia (2005)*						●	●				●		●			●				
Nigeria (2001)					●		●				●							●		
Rwanda (2009)				●			●					●			●					●
Senegal (2009)																				
Sudan (2014)																				
Tanzania (2011)		●	●		●								●					●		
Tunisia (2010)					●							●	●							
Uganda (2009)				●			●					●		●	●	●				
Zambia (2007)*							●				●		●			●				
Zimbabwe (2007)	●				●						●		●					●		

\*partner of the African Very Long Baseline Interferometry Network and of the Square Kilometre Array

Source: compiled by authors via the DST

enterprises or individuals. The 2012 amendment requires companies to apply for pre-approval of their R&D projects in order to qualify. The programme has grown over the past eight years and has provided tax reductions to nearly 400 claimants, nearly half of which are small and medium-sized enterprises. The programme has managed to leverage more than ten times the value in R&D from a R 3.2 billion government contribution to this incentive.

The earlier DST Innovation Fund (1999) has been transformed into a range of funding instruments grouped under the Technology Innovation programme administered by the Technology Innovation Agency, which has been operative since 2010. Some of the most recently launched funds include the Youth Technology Innovation Fund (2012) targeting innovators between the ages of 18 and 30 who receive

vouchers enabling them to access services and/or resources that they could not otherwise afford, and a Seed Fund (2012) to assist universities in bridging financing requirements, in order for them to translate university research output into ideas that can be commercialized.

The Technology and Human Resources for Industry (THRIP) scheme matches investment by industry in projects where researchers from public institutions, including universities, serve as project leaders and students are trained through projects in industry. THRIP was established in 1994 and was the object of an external evaluation in 2013; this was followed by a review of some THRIP processes that has been dubbed the 're-invigoration of THRIP'. This review led to a series of new measures, including the provision of student bursaries for the first time and the introduction of a 'first-come-first-served' rule