

Building innovation links between the UK & China

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Daresbury

Supported by



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China Now

- Celebrated 60 years of PRC in 2009
- Permanent member of UN Security Council
- 3rd largest economy in the world
- GDP 9% forecast for 2010 (IMF October 2009)
- 3rd country to launch a human into space
- Poverty alleviation - reduction in poor from 250 million in 1978 to 21.5 million in 2006



www.tradingeconomics.com



China Tomorrow

- An initiative that aims to facilitate technology transfer and joint innovation between the UK and China.
- Share information on best practice to facilitate partnerships that realise innovative potential.
- Provide increased access to information and opportunities for commercialisation.
- A CBBC initiative supported by the Department for Business, Innovation and Skills.

S&T in China

- World's largest “technocracy”: a country ruled by scientists and engineers who believe in the power of new technology
(James Wilsden 2007)
- Since 1999 R&D expenditure has increased by 20% year on year
- In 2006, China became the world's highest R&D investor (OECD)

S&T in China

- Vice Minister Du Zhanyuan has stated the S&T budget in 2009 will reach 176.1 billion RMB (~\$25.7 billion) - Dalian June 2009
- The budget is 25.6% higher than 2008
- Premier Wen announces an extra 121 billion RMB (20% increase) to boost farm yields and raise rural incomes (March 2009)
- GM crop R&D initiative of 32.5 billion RMB (September 2008)

Made in China vs Made by China

- In the 19th century imperial leaders promoted the slogan “*Zhong xue wei ti, xi xue wei yong*” - Eastern learning for foundation, Western learning for application.
- New mantra - independent innovation (*Zizhu chuangxin*).

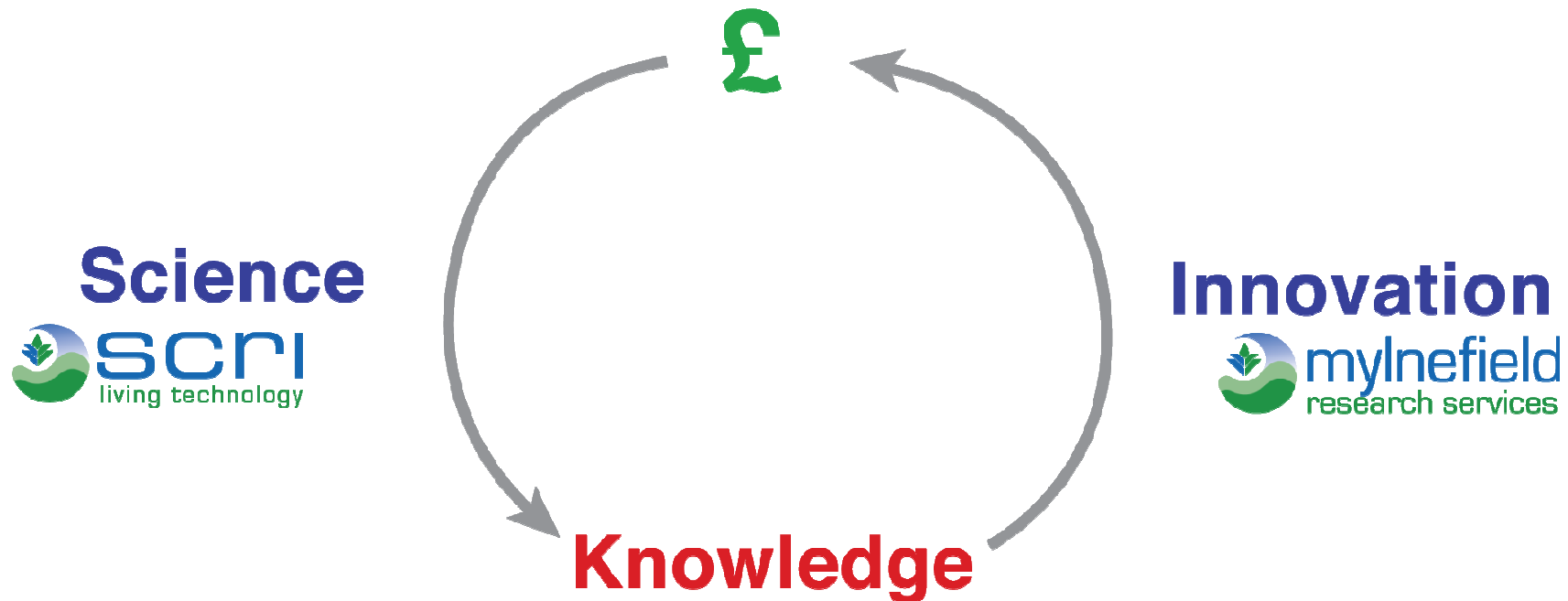


The Environment

- Chinese farms cause more pollution than factories (Guardian 9 February 2010 reporting on Chinese Government Census)
- Need for realignment of environmental policy
- Agriculture responsible for 44% chemical oxygen demand, 67% of phosphorus and 57% nitrogen discharges
- Improper use of fertiliser - grave impact on environment
- Need for sustainable food production

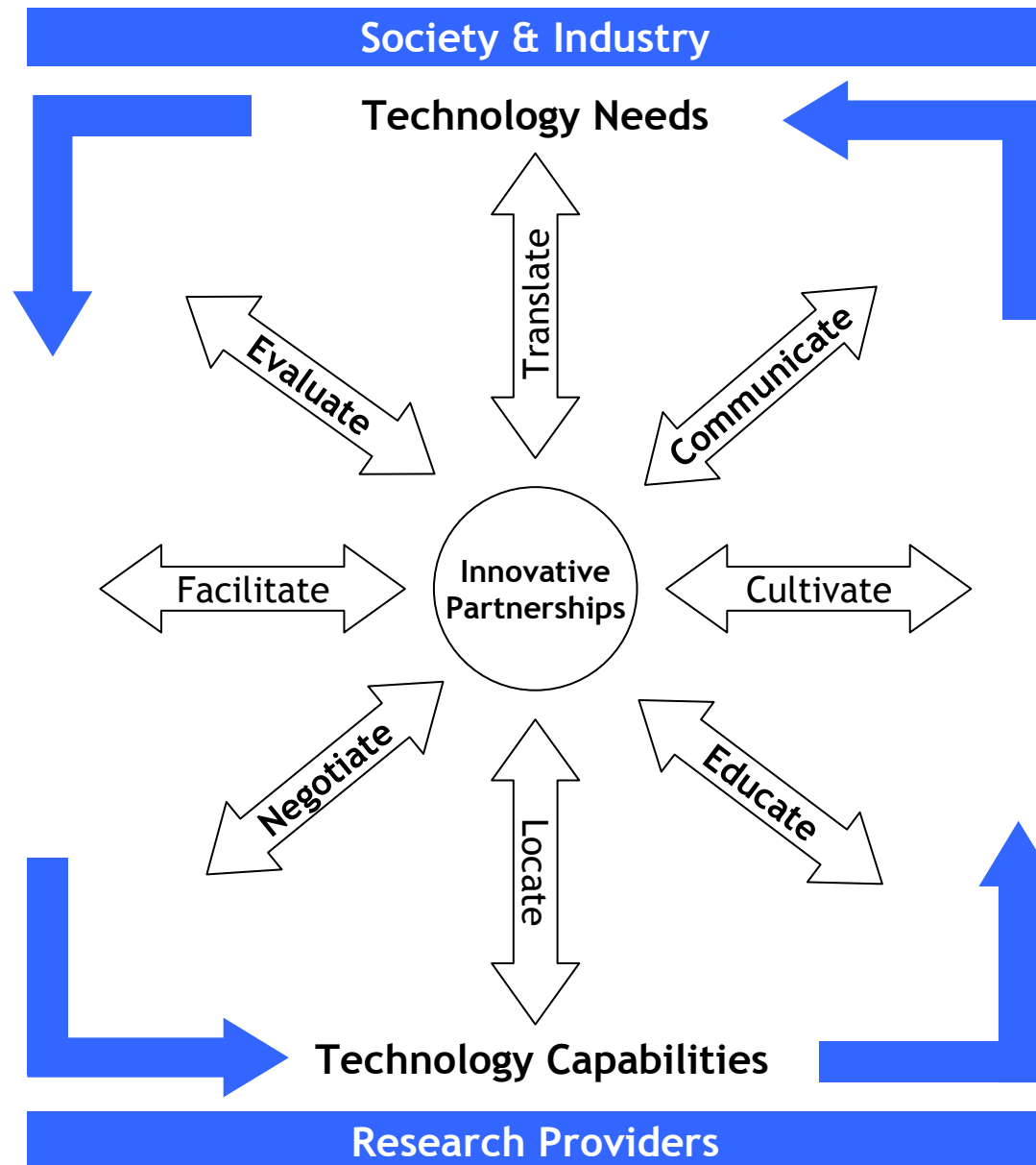


Science and Innovation



Independent economists have calculated that for every £1 of public money
SCRI/MRS generates £14 in the UK economy

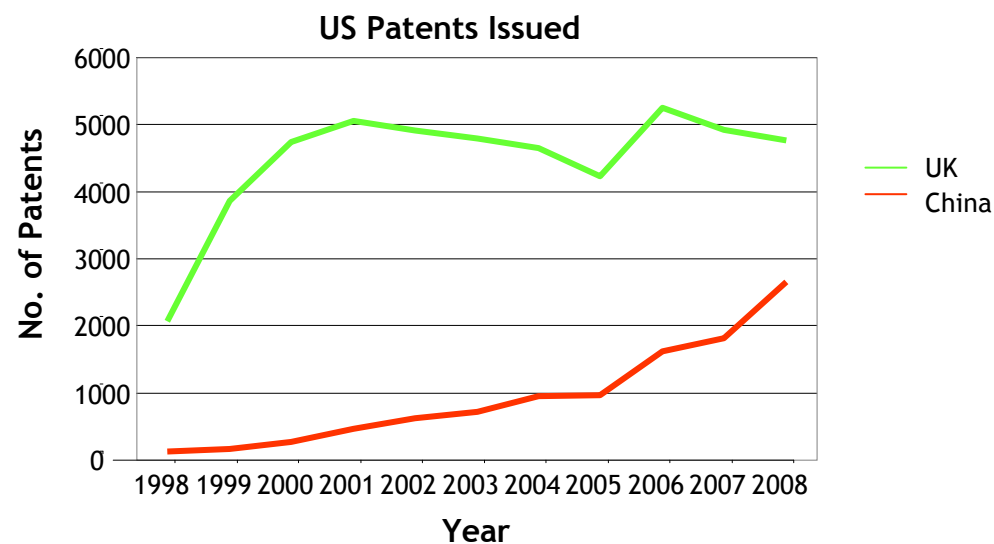
Innovative Partnerships



Issued US Patents

COUNTRY	NO. OF PATENTS*	POPULATION (M)
China	12,648	1,330
Sweden	36,229	9
UK	62,264	60
Japan	735,683	127

* Number of US issued patents since 1976



Plant Technology Patents

	Number of Publications								
Filed	China	UK	US	Europe	Japan	WIPO	Other	Total	% Domestic
China	20290	6	54	47	26	111	124	20658	98%
UK	205	3759	770	1131	484	881	4278	11508	33%
US	1304	471	45935	4795	2399	6211	17996	79111	58%

Comparing Chinese, UK and US patenting activity for horticulture, plant breeding and plant biotechnology

Science and Technology

“Science alone is not technology and technology alone is not innovation ...”

“It is technology which fuels the industrial engine. And it is engineers, not scientists who make technology happen”



(The late Akio Morita - Co-founder Sony).

China Britain Business Council

- Unrivalled network: presence in 11 cities in China and 7 in UK
- CBBC Board is the advisory group to UKTI services in China
- Major UK government contract to deliver UKTI services in China
- Consultancy provider
- Sector initiatives including AgriFood

Conclusions

- Develop business partnerships based on innovation between UK and China
- Locate inventions and innovations in key sectors e.g. environment, information communication and technology (ICT), life sciences, energy, advanced engineering, creative industries and agri-food technology
- Identify centres of excellence
- Support the innovation process from research providers
- Use organisations that have expert knowledge e.g. CBBC

And finally ...



Alice Panel 1 - Memorial Panel - White Rabbit, the Lizard and the Dodo
All Saints Church, Daresbury