

Promoting Trade and investment in Knowledge Based Industries in the IORA Region

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Background

- 'Knowledge' as a primary source of wealth creation and as a tool for poverty alleviation
- Many of the economic sectors that have experienced rapid growth over the last few decades, have been knowledge-intensive sectors
- Knowledge constitutes the main competitive advantage of industrialized economies.
- For Developing Economies, - Knowledge viewed as a key apparatus through which they could catapult themselves into the ranks of the developed world
- Within the IOR-ARC, each member economy is at various stages of a KBE development
- Variability in KBE development also presents vast potential for cooperation

Knowledge and the Knowledge Based Economy

- Knowledge has increasingly been recognized as the driver of productivity and economic growth, leading to a new focus on the role of information, technology and learning in economic performance
- A KBE is defined as an economy which is 'directly based on the production, distribution and use of knowledge and information' (OECD 1996, p.7), notably with the use of technology to enhance a country's economic growth and development.
- APEC expands on the OECD definition, to define a KBE as 'one in which the production, distribution and use of knowledge is the main driver of growth, wealth creation and employment across all industries'

Measuring Knowledge Based Economy

- Four KBE dimensions – business environment, ICT infrastructure, innovation systems and human resource development
- These four dimensions of a KBE referred to above can be interpreted as the fundamental preconditions required for a KBE.
- ICT is seen as an enabling technology for a KBE
- A well-developed innovation system that encourages continuous R&D is also key in transitioning to a KBE
- A KBE cannot be sustained without human resources
- A KBE can flourish only if the social, political, economic and legal framework of the economy is conducive to the development of

Classification of IOR-ARC Economies

	High Comparative Advantage	Sizable Comparative Advantage	Moderate Comparative Advantage	Low Comparative Advantage
Business Environment	Singapore, Seychelles	Malaysia, Thailand Mauritius, UAE	Oman, Mozambique, Madagascar, Australia, South Africa, Sri Lanka, India, Indonesia, Kenya	Bangladesh, Iran, Yemen, Tanzania
ICT Infrastructure	Singapore, Seychelles, UAE, Australia	Oman, Malaysia, Iran	Thailand, Mauritius, South Africa, Indonesia, Sri Lanka	Mozambique, Madagascar, Kenya, India, Bangladesh, Yemen, Tanzania,
Innovation System	Australia, Singapore	Malaysia, UAE, South Africa,	Kenya, Indonesia, Oman, India, Mauritius, Seychelles, Thailand,	Yemen, Mozambique, Sri Lanka, Tanzania, Iran, Bangladesh, Madagascar
Human Resource Development	Seychelles, Singapore	Oman, Malaysia, South Africa Australia, UAE	Mauritius, Sri Lanka, India, Yemen, Iran, Thailand, Indonesia, Kenya	Madagascar, Tanzania, Mozambique, Bangladesh

Potential Areas for Cooperation - ICT

ICT Infrastructure		
	Challenges	Opportunities
Australia	<ul style="list-style-type: none"> • Affordability of telephony services • Low fixed broadband coverage 	<ul style="list-style-type: none"> • Universal access in mobile telecommunication • High level of household access to personal computers • High internet usage at household • High ICT penetration in schools and government services
Malaysia	<ul style="list-style-type: none"> • Low availability and diffusion of communication infrastructure • Low penetration of ICT at the household level 	<ul style="list-style-type: none"> • Well-developed ICT infrastructure
Mauritius	<ul style="list-style-type: none"> • Low fixed broadband coverage • Low penetration of PC's at household level • Low percentage of ICT related exports and imports 	<ul style="list-style-type: none"> • Universal access in mobile telecommunication
Bangladesh	<ul style="list-style-type: none"> • Low penetration of fixed telephone lines • Low access to internet at household level • Low penetration of PC's at household level 	<ul style="list-style-type: none"> • Affordable mobile cellular services • Affordable fixed broad band services

Potential Areas for Cooperation - Innovation

Innovation System		
	Challenges	Opportunities
Australia	<ul style="list-style-type: none"> • Low availability of venture capital 	<ul style="list-style-type: none"> • Strong intellectual property rights regime and strong enforcement • Availability of researchers and technical personnel in R&D • High level of university-industry collaboration in R&D • Availability of scientists and engineers
Malaysia	<ul style="list-style-type: none"> • Low availability of venture capital • Low level of researchers and technical personnel in R&D • Poor enforcement of IPR Laws 	<ul style="list-style-type: none"> • High level of university-industry collaboration in R&D • Availability of scientists and engineers • Strong intellectual property rights regime
Mauritius	<ul style="list-style-type: none"> • Low availability of venture capital • Low level of researchers and technical personnel in R&D • Low level of R&D expenditure • Low availability of scientists and engineers 	
Bangladesh	<ul style="list-style-type: none"> • Low availability of venture capital • Low availability of research and training services • Weak Intellectual property protection • Low government procurement of advance technology 	

Potential Areas for Cooperation - HRD

Human Resources Development		
Australia		<ul style="list-style-type: none"> • Highly educated workforce • Highly developed tertiary education sector • Novel mechanisms for funding tertiary education • High percentage of knowledge workers
Malaysia	<ul style="list-style-type: none"> • Low availability of knowledge workers • Issues regarding quality of tertiary education • Lack of research focus in tertiary education 	<ul style="list-style-type: none"> • Moderately well-educated labour force • Developed primary and secondary education sectors •
Mauritius	<ul style="list-style-type: none"> • Low availability of knowledge workers • Constrained access for secondary education • Low enrollment in secondary and tertiary education • Issues regarding quality of education • Lack of research focus in tertiary education 	<ul style="list-style-type: none"> • High primary school enrollment
Bangladesh	<ul style="list-style-type: none"> • Considerably low availability of knowledge workers • Low enrollment in secondary and tertiary education • Poor quality of education 	