

ASEAN Cooperation in Science and Technology

towards building the ASEAN Community


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Alexander A. Lim (alex@asean.org)
Science and Technology Division
ASCC Dept., ASEAN Secretariat



Outline of presentation


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A Quick Look at ASEAN Community Building

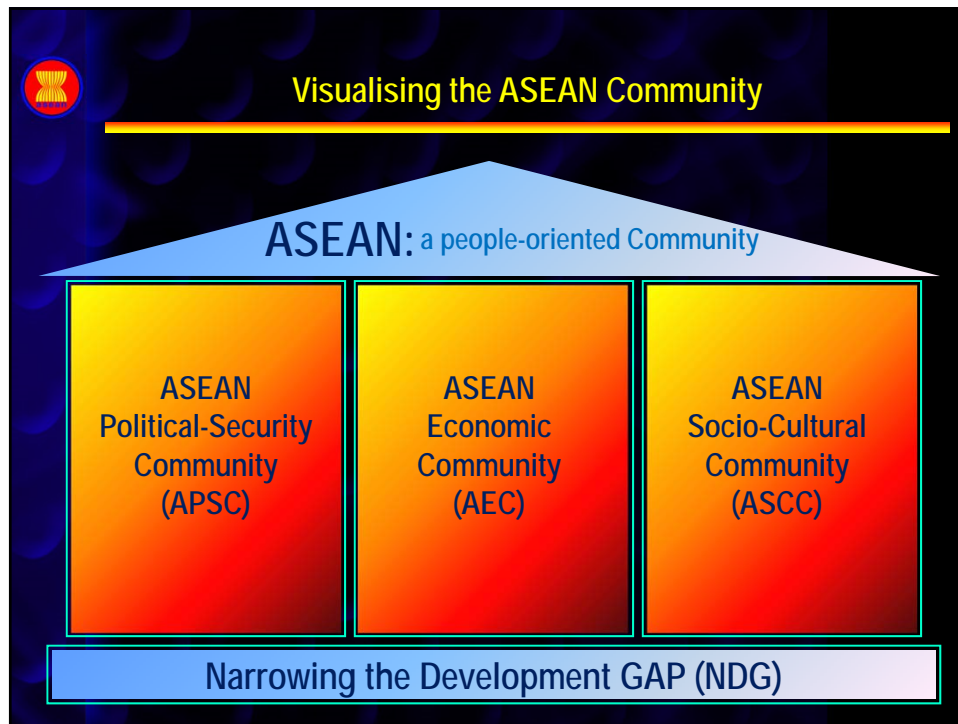
1. ASEAN Vision 2020
 - Adopted at the 2nd ASEAN Informal Summit on 15 Dec. 1997, KL, Malaysia
 - ↳ A Concert of Southeast Asian Nations
 - ↳ An Outward-looking ASEAN
 - ↳ A Partnership in Dynamic Development
 - ↳ A Community of Caring Societies

“a technologically competitive ASEAN competent in strategic and enabling technologies, with an adequate pool of technologically qualified and trained manpower, and strong networks of scientific and technological institutions and centers of excellence.”
2. Hanoi Plan of Action (HPA) 1999-2004
 - Adopted at the 6th ASEAN Summit on 15 Dec. 1998 in Hanoi, Viet Nam
3. 9th ASEAN Summit in Bali, Indonesia 2003: Bali Concord II
 - Establishment of the ASEAN Community: ASC; AEC; and ASCC
4. Vientiane Action Programme (2004-2010)
 - Adopted at the 10th ASEAN Summit on 29 Nov. 2004 in Vientiane, Lao PDR



A Quick Look at ASEAN Community Building

5. Cebu Declaration on the ASEAN Charter and ASEAN Community
 - Adopted at the 12th ASEAN Summit on 13 Jan. 2007 in Cebu, PH
 - ↳ Agreed to accelerate the establishment of the ASEAN Community from 2020 to 2015
6. The AEC Blueprint and its strategic schedule
 - Adopted at the 13th ASEAN Summit on 20 Nov. 2007 in Singapore
7. Entry into force of the ASEAN Charter on 15 Dec. 2008
8. The APSC & ASCC Blueprints & the 2nd IAI Work Plan were adopted at the 14th ASEAN Summit on 1 March 2009 in Cha-am, Thailand



ASEAN in Figures (2012)

Country	Land Area (km ²)	Population ('000)	GDP (USD million)	GDP (per capita)	Total Trade (USD million)	GDP Growth Rate
Brunei Darussalam	5,765	400	16,970	42,445	16,856	1.0%
Cambodia	181,035	14,741	14,411	978	18,664	7.0%
Indonesia	1,860,360	244,776	878,223	3,588	381,721	6.2%
Lao PDR	236,800	6,514	9,083	1,394	6,159	7.9%
Malaysia	330,252	29,337	305,154	10,338	423,930	5.6%
Myanmar	676,577	60,976	52,525	861	18,503	5.6%
Philippines	300,000	97,691	250,543	2,565	117,382	6.8%
Singapore	710	5,312	276,610	52,069	788,117	1.3%
Thailand	513,120	67,912	366,127	5,391	477,302	6.5%
Viet Nam	331,051	88,773	141,669	1,596	227,793	5.0%
ASEAN	4,435,670	616,614	2,311,315	3,748	2,476,427	5.7%





The ASEAN Committee on Science and Technology (COST)

A little bit of history:

1. ASEAN was established on 8 August 1967
2. Ad-hoc Committee on Science and Technology met in Jakarta on 27-29 April 1970
3. The ASEAN Permanent Committee on Science and Technology (PCOST) was established in 1971. PCOST ⇒ COST in 1978
4. First meeting of ASEAN COST on 20-22 June 1978

Mandate:

"ASEAN shall promote active collaboration and mutual assistance on matters of common interest in the economic, social, cultural, technical, scientific and administrative fields and provide assistance to each other in the form of training and research facilities in the educational, professional, technical and administrative spheres"

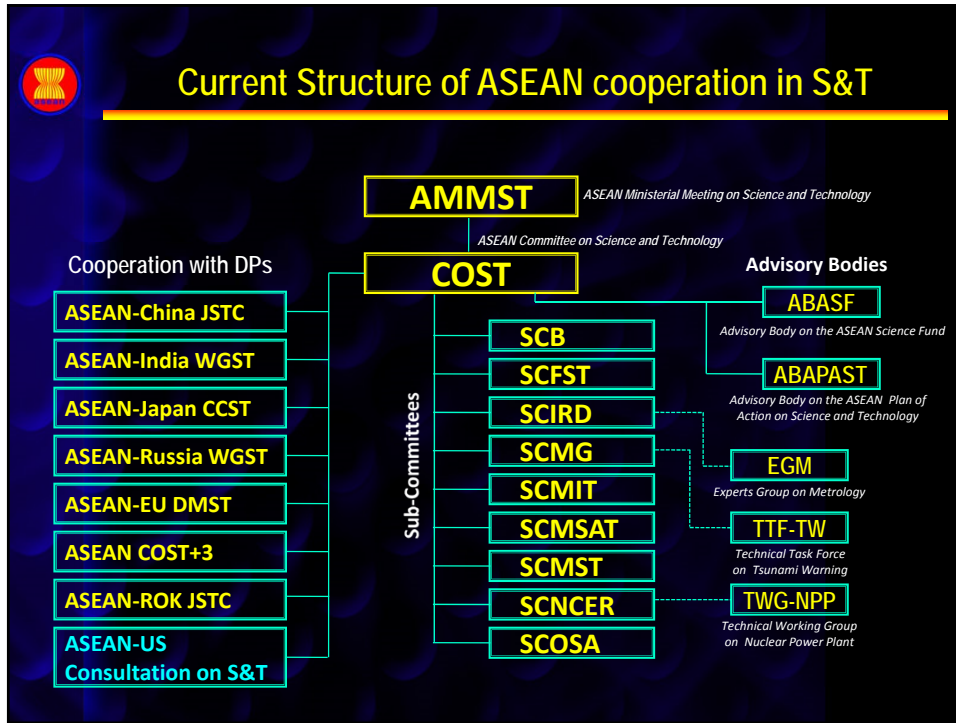
Vision:

"A technologically competitive ASEAN, competent in strategic and enabling technologies, with an adequate pool of technologically qualified and trained manpower, and strong networks of scientific and technological institutions and centres of excellence".




The ASEAN Plan of Action on S&T (APAST 2007-2011)

- Guiding document in pursuing regional cooperation in S&T
- Strategic Thrusts:
 1. Intensify R&D collaboration and technology commercialization
 2. Develop S&T human resources;
 3. Network S&T Centres of excellence and programmes;
 4. Promote S&T awareness and utilisation;
 5. Strengthen S&T infrastructure and support systems; and
 6. Forge closer cooperation with dialogue partners.
- Areas covered under regional S&T cooperation
 1. Biotechnology
 2. Food Science and Technology
 3. S&T Infrastructure and Resources Development
 4. Meteorology and Geophysics
 5. Microelectronics and Informations Technology
 6. Marine Science and Technology
 7. Materials Science and Technology
 8. Non-Conventional Energy Research
 9. Space Technology and Applications



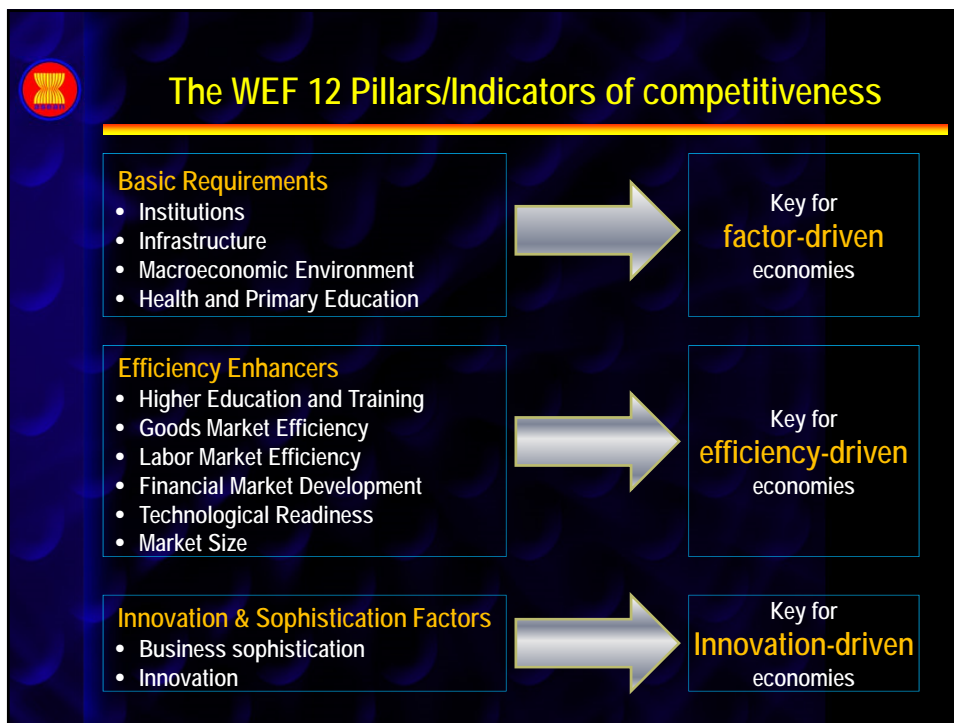
- Acronyms:**
- ABAPAST: Advisory Body on the ASEAN Plan of Action on Science and Technology
 - ABASF: Advisory Body of the ASEAN Science Fund
 - AMMST: ASEAN Ministerial Meeting on Science & Technology
 - ASEAN-China JSTC: ASEAN-China Joint Science and Technology Committee
 - ASEAN-Japan CCST: ASEAN-Japan Cooperation Committee on Science and Technology
 - ASEAN-India WGST: ASEAN-India Working Group on Science and Technology
 - ASEAN-Russia WGST: ASEAN-Russia Working Group on Science and Technology
 - ASEAN-EU DMST: ASEAN-EU Dialogue Meeting on Science and Technology
 - ASEAN COST+3: Committee on Science and Technology Plus Three (China, Japan and ROK)
 - ASEAN-ROK JSTC: ASEAN-ROK Joint Science and Technology Committee
 - ASEAN-US CST: ASEAN-US Consultation on Science and Technology
 - COST: ASEAN Committee on Science and Technology
 - EGM: ASEAN Experts Group on Metrology
 - SCB: Sub-Committee on Biotechnology
 - SCFST: Sub-Committee on Food Science and Technology
 - SCIRD: Sub-Committee on S&T Infrastructure and Resources Development
 - SCMG: Sub-Committee on Meteorology and Geophysics
 - SCMIT: Sub-Committee on Microelectronics and Information Technology
 - SCMSAT: Sub-Committee on Marine Science and Technology
 - SCMST: Sub-Committee on Materials Science and Technology
 - SCNCER: Sub-Committee on Non-Conventional Energy Research
 - SCOSA: Sub-Committee on Space Technology and Applications
 - TTF-TW: Technical Task Force on Tsunami Warning
 - TWG-NPP: Technical Working Group on Nuclear Power Plant




State of S&T development in ASEAN

Country	GERD (in '000 PPP\$)*	GERD (% of GDP)*	Per capita GERD ('000 PPP \$)*	No. of Researchers (per M pop.)	Scientific Publications (2008)
Brunei (2004)	6,268	0.04%	17.30	673	40
Cambodia (2002)	6,816	0.05%	0.50	56	75
Indonesia (2009)	803,522	0.04%	3.50	179	650
Lao PDR (2002)	2,637	0.04%	0.50	37	52
Malaysia (2008)	3,161,875	0.82%	80.10	1,135	2,712
Myanmar (2002)		0.16%	0.16	100	37
Philippines (2007)	342,491	0.11%	3.90	130	624
Singapore (2008)	6,605,896	2.26%	1,431.40	7,230	6,813
Thailand (2007)	1,120,750	0.21%	16.70	582	4,134
Viet Nam (2002)	252,019	0.19%	3.10	508	878


** Data Source: UNESCO Institute of Statistics*






ASEAN ranking in Global Competitiveness

Country	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014
Brunei Darussalam	32	28	28	28	26 ↑
Cambodia	110	109	97	85	88 ↓
Indonesia	54	44	46	50	38 ↑
Lao PDR	-	-	-	-	81
Malaysia	24	26	21	25	24 ↑
Myanmar	-	-	-	-	139
Philippines	87	85	75	65	59 ↑
Singapore	3	3	2	2	2 ↔
Thailand	36	38	39	38	37 ↑
Viet Nam	75	59	65	70	70 ↔
Japan	8	6	9	10	9 ↑



ASEAN COST Flagship Programmes

1. **Early Warning System for Disaster Risk Reduction**
By 2015, there shall be for all ASEAN Member States, an established and operational national monitoring system for earthquake, tsunami, tropical cyclone, forest fire haze and flood, that is interoperable and linked regionally for early warning.
2. **Biofuels**
By 2015, ASEAN will significantly use biofuel to reduce dependence on fossil fuel
3. **Applications and Development of Open Source System;**
By 2015, Open Source System will become a viable software option/platform in ASEAN governments, industries, and the research, academic, and end-user communities
4. **Functional Foods**
To drive for the creation of functional food industry in ASEAN by 2013
5. **Climate Change**
Working towards a Climate Change resilient ASEAN Region by 2015 through S&T intervention
6. **Health**
To build on the current knowledge to coordinate and galvanize S&T activities to provide scientific solutions to manage a group of infectious diseases that are of concern to the ASEAN region



Recent COST Decisions

1. Extension of the ASEAN Plan of Action on S&T (APAST 2007-2011) to 2015
2. Establishment of the Experts Group on Metrology
3. Adoption of the Krabi Initiative in December 2010

Krabi Initiative:

1. Theme:
Science Technology and Innovation (STI) for a Competitive, Sustainable and Inclusive ASEAN
2. Focus no longer limited to S&T. Equal importance is placed on innovation
3. Eight thematic tracks to pursue
4. Paradigm shift
5. Courses of action to take

Krabi Initiative 2010:


Science Technology and Innovation (STI) for a Competitive, Sustainable and Inclusive ASEAN

Rationale	ASEAN 2015 – Vision of ASEAN Leaders				
	Roles of STI – A Balance of Competitiveness and Human Development (People-oriented STI)				
	Reinventing ASEAN Scientific Community for a Meaningful Delivery of STI Agenda in ASEAN				
Thematic Tracks	ASEAN Innovation for Global Market	Digital Economy, New Media & Social Network	Green Technology	Food Security	
	Energy Security	Water Management	Biodiversity for Health & Wealth	Science and Innovation for Life	
Paradigm Shifts	STI Enculturation	Bottom-of-the-Pyramid Focus (BOP)	Youth-focused Innovation	STI for Green Society	Public-Private Partnership Platform
	Organisational restructure for a meaningful delivery of STI agenda in ASEAN				
Courses of Action	Develop mechanisms to pursue partnerships and cooperation with other stakeholders in STI				
	Enhance the ASEAN Plan of Action on S&T for 2012-2015 and leverage the recommendations of the Krabi Retreat for development of future APAST beyond 2015				
	Implement monitoring & evaluation mechanism for the implementation of STI thematic tracks				



Usual Obstacles and Constraints


1. Commitment on implementation & resource mobilisation
2. Lack of effective coordination mechanisms
3. Absence of appropriate M&E system
4. Focus on small projects towards development cooperation
5. Weak ownership of relevant stakeholders



Conceptual Framework of the APASTI (2016-2020)*

Current APAST (2007-2011-2015)	Proposed APASTI (2016-2020)
Exclusiveness of S&T	Inclusiveness of S&T and Innovation
Knowledge generation and application	Knowledge transformation
State/Institution-oriented	People-oriented
State players	State and non-state players

* Source: Presentation of Dr. Pichet Durongkaveroj, Secretary General of STI office, Thailand at the ASEAN-EU STI days, 23 Jan. 2014.



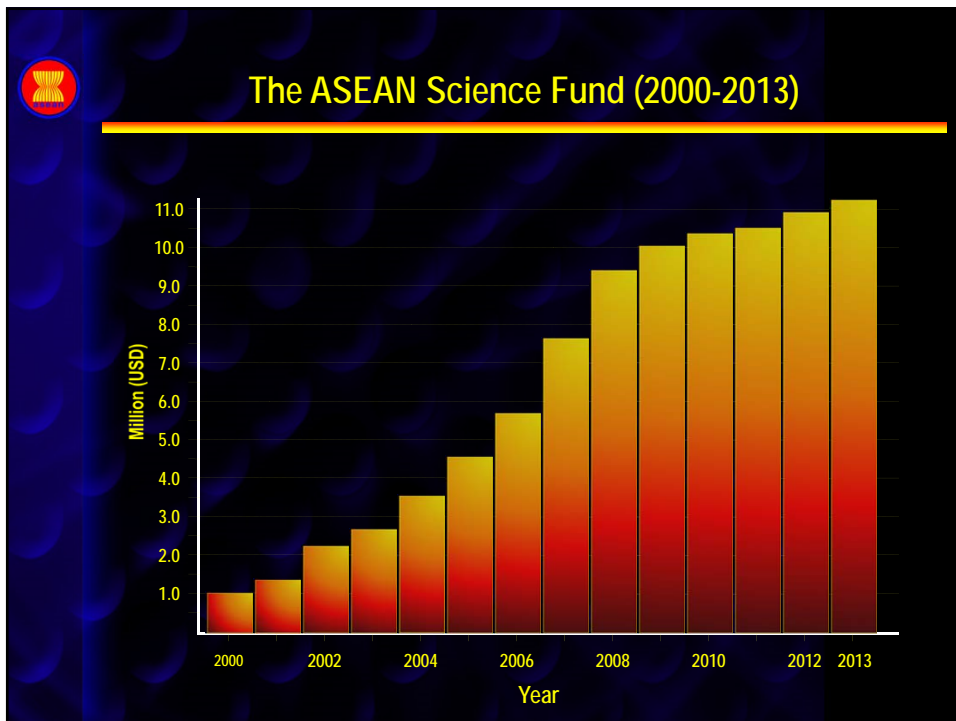
Resource Mobilisation

1. **Dialogue Partners Support**

a. Australia	f. Japan	k. Pakistan
b. Canada	g. New Zealand	
c. China	h. Republic of Korea	
d. European Union	i. Russian Federation	
e. India	j. United States	

2. **ASEAN-help-ASEAN Scheme**

3. **ASEAN Science Fund (ASF)**
 - Established in 1989 with seed contribution of USD 50,000 from each AMS. New Zealand Government contributed NZD 100,000 (USD 58,218.65).
 - The S&T Ministers agreed in 2000 to augment the ASF whereby each AMS shall contribute USD 1M to the ASF for a period of 8 years.





The proposed ASEAN Innovation Fund (AInF)

1. The 7th Informal ASEAN Ministerial Meeting on Science and Technology (IAMMST-7) in Jerudong, Brunei Darussalam, 2 December 2012 noted the proposal on the establishment of new funding mechanism namely ASEAN Innovation Fund (AInF)
2. The IAMMST-7 further agreed that a holistic study shall be undertaken to study the proposals on reorganisation / restructuring of COST and the proposed establishment of AInF
3. USD 5 million is proposed to be the seed fund for the AInF. The amount shall be sourced from the existing ASF, with the understanding that the sum USD 5M will be returned to the ASF at a future time.
4. The 15th ASEAN Ministerial Meeting on S&T (AMMST-15) welcomed the proposed launching of the ASEAN Science, Technology and Innovation (STI) Challenges initiative. Call for innovation-focused proposals with funding support from the ASF shall be made and the announcement of grant recipients will be announced at the 67th Meeting of COST in April 2014 in Singapore..



The proposed ASEAN Innovation Fund (AInF)

5. The AMMST-15 recalled that the feasibility of establishing the ASEAN Innovation Fund (AInF) will be part of the APASTI 2016-2020 development work. While awaiting the completion of the APASTI, an expert group meeting shall be convened to study the expansion of the scope of utilisation of the ASF to support innovation-driven projects and the rebranding of the ASEAN Trust Fund for Science and Technology (ASF) to the ASEAN Trust Fund for Science, Technology and Innovation (ASTIF).



Talent Mobility

1. The S&T Ministers agreed in December 2010 that the Krabi Initiative implementation should observe the following:
 - Be supportive of the objectives of COST flagship programmes;
 - Synergise ASEAN R&D human resource through an exchange programme; and make the programme a part of all the COST flagship programmes.
2. Launching of the ASEAN-China Talented Young Scientist Visiting Program where young scientists under the age of 45 from ASEAN member states shall be sponsored to work for 6 or 12 months as visiting scholars in Chinese research institutes, universities or enterprises.
3. EURAXESS is a key initiative to promote research careers and facilitate the mobility of researchers to and from Europe.
4. ASEAN Talent Mobility (ATM) Workshop to be hosted by STI, Thailand on 27-28 March 2014
 - Discuss Policies and mechanisms to promote talent mobility in ASEAN
 - Exchange views and experiences in talent management
 - Study the feasibility of establishing ATM program as a platform among ASEAN Member States and Dialogue Partners





Doing the same thing,
the same way over and over,
yet expecting different results
is a classic definition of ...

CRAZY!

anonymous

Thank you for your attention
